Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jul-2011	SL-059-SA6-SS-0.0-0.5	6343400	N	3550B	8270C	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5	6343400	N	3550B	8270C SIM	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5	6343400	N	METHOD	300.0	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5	6343400	N	METHOD	314.0	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5	6343400	N	METHOD	6850	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5	6343400	N	METHOD	7471A	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5	6343400	N	METHOD	8015B	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5	6343400	N	METHOD	8015M	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5DUP	P343400D222309	DUP	3050B	6010B	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5MSD	P343400M222317	MSD	3050B	6010B	IV
13-Jul-2011	SL-059-SA6-SS-0.0-0.5MS	P343400R222313	MS	3050B	6010B	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	3050B	6010B	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	3050B	6020	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	3060A	7199	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	3550B	8015B	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	3550B	8015M	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	3550B	8082	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	3550B	8270C	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	3550B	8270C SIM	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	5035	8015M	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	METHOD	300.0	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	METHOD	314.0	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	METHOD	7471A	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	METHOD	8015B	IV
13-Jul-2011	SL-118-SA6-SB-10.5-11.5	6343409	N	METHOD	8015M	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3050B	6010B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3050B	6020	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3060A	7199	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3546	1625C	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3550B	8015B	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3550B	8015M	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3550B	8081A	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3550B	8082	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3550B	8151A	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3550B	8270C	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	3550B	8270C SIM	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	8330	8330A	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	METHOD	300.0	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	METHOD	314.0	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	METHOD	7471A	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	METHOD	8015B	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	METHOD	8015M	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	METHOD	8315A	IV
13-Jul-2011	SL-047-SA6-SS-0.0-0.5	6343399	N	METHOD	9012B	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	3050B	6010B	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	3050B	6020	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	3060A	7199	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	3550B	8015B	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	3550B	8015M	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	3550B	8082	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	3550B	8270C	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	3550B	8270C SIM	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	5035	8015M	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	5035	8260B	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	5035	8260B SIM	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	METHOD	300.0	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	METHOD	314.0	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	METHOD	7471A	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	METHOD	8015B	IV
13-Jul-2011	SL-118-SA6-SB-4.0-5.0	6343408	N	METHOD	8015M	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3050B	6010B	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3050B	6020	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3060A	7199	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3546	1625C	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3550B	8015B	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3550B	8015M	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3550B	8081A	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3550B	8082	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3550B	8151A	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3550B	8270C	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	3550B	8270C SIM	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	8330	8330A	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	METHOD	300.0	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	METHOD	314.0	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	METHOD	7471A	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	METHOD	8015B	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	METHOD	8015M	IV
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	METHOD	8315A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jul-2011	SL-067-SA6-SS-0.0-0.5	6343402	N	METHOD	9012B	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3050B	6010B	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3050B	6020	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3060A	7199	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3546	1625C	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3550B	8015B	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3550B	8015M	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3550B	8081A	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3550B	8082	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3550B	8151A	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3550B	8270C	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	3550B	8270C SIM	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	8330	8330A	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	METHOD	300.0	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	METHOD	314.0	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	METHOD	7471A	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	METHOD	8015B	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	METHOD	8015M	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	METHOD	8315A	IV
13-Jul-2011	SL-066-SA6-SS-0.0-0.5	6343401	N	METHOD	9012B	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	3050B	6010B	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	3050B	6020	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	3060A	7199	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	3550B	8015B	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	3550B	8015M	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	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
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	3550B	8270C	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	3550B	8270C SIM	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	5035	8015M	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	5035	8260B	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	5035	8260B SIM	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	METHOD	300.0	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	METHOD	314.0	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	METHOD	7471A	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	METHOD	8015B	IV
13-Jul-2011	SL-083-SA6-SB-4.0-5.0	6343410	N	METHOD	8015M	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	3050B	6010B	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	3050B	6020	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	3060A	7199	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	3550B	8015B	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	3550B	8015M	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	3550B	8082	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	3550B	8270C	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	3550B	8270C SIM	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	5035	8015M	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	METHOD	300.0	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	METHOD	314.0	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	METHOD	7471A	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	METHOD	8015B	IV
13-Jul-2011	SL-083-SA6-SB-9.0-10.0	6343411	N	METHOD	8015M	IV

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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: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.83	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** AQ

Sample ID: EB-SA6-SB-071311 *Collected:* 7/13/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0074	J	0.0022	MDL	0.0500	PQL	mg/L	U	B
CALCIUM	0.0740	J	0.0705	MDL	0.200	PQL	mg/L	J	Z
STRONTIUM	0.00047	J	0.00022	MDL	0.0050	PQL	mg/L	U	B

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.96	J	0.363	MDL	5.04	PQL	mg/Kg	U	F
PHOSPHORUS	465		0.353	MDL	10.1	PQL	mg/Kg	J	Q, E
TIN	2.40	J	0.322	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.97	J	0.463	MDL	5.04	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4120		2.52	MDL	20.2	PQL	mg/Kg	J	E

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.69	J	0.358	MDL	4.97	PQL	mg/Kg	U	F
PHOSPHORUS	370		0.348	MDL	9.94	PQL	mg/Kg	J	Q, E
TIN	1.93	J	0.318	MDL	9.94	PQL	mg/Kg	U	B
Zirconium	2.28	J	0.457	MDL	4.97	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-035-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 10:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2460		2.49	MDL	19.9	PQL	mg/Kg	J	E
SODIUM	63.5	J	5.92	MDL	99.4	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 9:45:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.77	J	0.369	MDL	5.12	PQL	mg/Kg	U	F
PHOSPHORUS	401		0.359	MDL	10.2	PQL	mg/Kg	J	Q, E
TIN	2.44	J	0.328	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.41	J	0.471	MDL	5.12	PQL	mg/Kg	U	B

Sample ID: SL-040-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 9:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2380		2.56	MDL	20.5	PQL	mg/Kg	J	E
SODIUM	58.0	J	6.10	MDL	102	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 10:23:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.823	J	0.360	MDL	5.00	PQL	mg/Kg	U	F
PHOSPHORUS	348		0.350	MDL	10.0	PQL	mg/Kg	J	Q, E
TIN	1.80	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	1.44	J	0.460	MDL	5.00	PQL	mg/Kg	U	B

Sample ID: SL-046-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 10:23:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2100		2.50	MDL	20.0	PQL	mg/Kg	J	E
SODIUM	63.9	J	5.95	MDL	100	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 1:53:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.00	J	0.364	MDL	5.06	PQL	mg/Kg	U	F

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-047-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 1:53:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	345		0.354	MDL	10.1	PQL	mg/Kg	J	Q, E
TIN	2.30	J	0.324	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.64	J	0.465	MDL	5.06	PQL	mg/Kg	U	B

Sample ID: SL-047-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 1:53:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2350		2.53	MDL	20.2	PQL	mg/Kg	J	E
SODIUM	53.9	J	6.02	MDL	101	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 1:23:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.632	J	0.348	MDL	4.83	PQL	mg/Kg	U	F
PHOSPHORUS	298		0.338	MDL	9.66	PQL	mg/Kg	J	Q, E
TIN	2.06	J	0.309	MDL	9.66	PQL	mg/Kg	U	B
Zirconium	1.60	J	0.445	MDL	4.83	PQL	mg/Kg	U	B

Sample ID: SL-059-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 1:23:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2890		2.42	MDL	19.3	PQL	mg/Kg	J	E

Sample ID: SL-066-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 2:43:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.02	J	0.361	MDL	5.01	PQL	mg/Kg	U	F
PHOSPHORUS	297		0.351	MDL	10.0	PQL	mg/Kg	J	Q, E
TIN	2.05	J	0.321	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	1.84	J	0.461	MDL	5.01	PQL	mg/Kg	U	B

Sample ID: SL-066-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 2:43:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2040		2.51	MDL	20.0	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	59.0	J	5.96	MDL	100	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:13:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.31	J	0.364	MDL	5.05	PQL	mg/Kg	U	F
PHOSPHORUS	345		0.354	MDL	10.1	PQL	mg/Kg	J	Q, E
TIN	2.24	J	0.323	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.06	J	0.465	MDL	5.05	PQL	mg/Kg	U	B

Sample ID: SL-067-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:13:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2500		2.53	MDL	20.2	PQL	mg/Kg	J	E
SODIUM	63.0	J	6.01	MDL	101	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 8:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.05	J	0.390	MDL	5.41	PQL	mg/Kg	U	F
PHOSPHORUS	269		0.379	MDL	10.8	PQL	mg/Kg	J	Q, E
TIN	2.47	J	0.346	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.35	J	0.498	MDL	5.41	PQL	mg/Kg	U	B

Sample ID: SL-072-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 8:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1960		2.71	MDL	21.6	PQL	mg/Kg	J	E

Sample ID: SL-072-SA6-SB-9.0-10.0 *Collected:* 7/13/2011 8:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.772	J	0.395	MDL	5.48	PQL	mg/Kg	U	F
PHOSPHORUS	177		0.384	MDL	11.0	PQL	mg/Kg	J	Q, E
TIN	2.69	J	0.351	MDL	11.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-072-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 8:35:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.94	J	0.504	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 8:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2140		2.74	MDL	21.9	PQL	mg/Kg	J	E

Sample ID: SL-083-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 3:05:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	383		0.374	MDL	10.7	PQL	mg/Kg	J	Q, E
TIN	2.20	J	0.342	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.01	J	0.491	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 3:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	12900		2.67	MDL	21.3	PQL	mg/Kg	J	E

Sample ID: SL-083-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 3:15:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	365		0.383	MDL	10.9	PQL	mg/Kg	J	Q, E
TIN	2.52	J	0.350	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.83	J	0.503	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 3:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	16800		2.74	MDL	21.9	PQL	mg/Kg	J	E

Sample ID: SL-116-SA6-SB-2.5-3.5 ***Collected:*** 7/13/2011 9:35:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.422	J	0.372	MDL	5.17	PQL	mg/Kg	U	F
PHOSPHORUS	198		0.362	MDL	10.3	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-116-SA6-SB-2.5-3.5 ***Collected:*** 7/13/2011 9:35:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.50	J	0.331	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.59	J	0.476	MDL	5.17	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA6-SB-2.5-3.5 ***Collected:*** 7/13/2011 9:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2680		2.58	MDL	20.7	PQL	mg/Kg	J	E

Sample ID: SL-118-SA6-SB-10.5-11.5 ***Collected:*** 7/13/2011 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
PHOSPHORUS	569		0.367	MDL	10.5	PQL	mg/Kg	J	Q, E
TIN	1.86	J	0.335	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.21	J	0.482	MDL	5.24	PQL	mg/Kg	U	B

Sample ID: SL-118-SA6-SB-10.5-11.5 ***Collected:*** 7/13/2011 1:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4280		2.62	MDL	21.0	PQL	mg/Kg	J	E

Sample ID: SL-118-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 1:55:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.00	J	0.391	MDL	5.42	PQL	mg/Kg	J	Z
PHOSPHORUS	467		0.380	MDL	10.8	PQL	mg/Kg	J	Q, E
TIN	1.79	J	0.347	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.68	J	0.499	MDL	5.42	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 1:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	24800		2.71	MDL	21.7	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.63	J	0.355	MDL	4.93	PQL	mg/Kg	U	F
PHOSPHORUS	782		0.345	MDL	9.86	PQL	mg/Kg	J	Q, E
TIN	2.19	J	0.316	MDL	9.86	PQL	mg/Kg	U	B

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4120		2.47	MDL	19.7	PQL	mg/Kg	J	E
Zirconium	1.48	J	0.454	MDL	4.93	PQL	mg/Kg	U	B

Sample ID: SL-279-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 7:38:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.43	J	0.360	MDL	5.00	PQL	mg/Kg	U	F
PHOSPHORUS	607		0.350	MDL	10.0	PQL	mg/Kg	J	Q, E
TIN	1.98	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	1.56	J	0.460	MDL	5.00	PQL	mg/Kg	U	B

Sample ID: SL-279-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 7:38:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4640		2.50	MDL	20.0	PQL	mg/Kg	J	E
SODIUM	83.5	J	5.96	MDL	100	PQL	mg/Kg	J	Z

Sample ID: SL-280-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:43:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.91	J	0.372	MDL	5.16	PQL	mg/Kg	U	F
PHOSPHORUS	445		0.361	MDL	10.3	PQL	mg/Kg	J	Q, E
TIN	2.18	J	0.330	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.83	J	0.475	MDL	5.16	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-280-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:43:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5650		2.58	MDL	20.6	PQL	mg/Kg	J	E
SODIUM	92.4	J	6.14	MDL	103	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 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
PHOSPHORUS	1780		0.355	MDL	10.1	PQL	mg/Kg	J	Q, E
TIN	2.17	J	0.325	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.32	J	0.467	MDL	5.07	PQL	mg/Kg	U	B

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 2:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	13300		2.54	MDL	20.3	PQL	mg/Kg	J	E

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.78	J	0.356	MDL	4.95	PQL	mg/Kg	U	F
PHOSPHORUS	927		0.346	MDL	9.89	PQL	mg/Kg	J	Q, E
TIN	1.96	J	0.317	MDL	9.89	PQL	mg/Kg	U	B
Zirconium	1.58	J	0.455	MDL	4.95	PQL	mg/Kg	U	B

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	12800		2.47	MDL	19.8	PQL	mg/Kg	J	E

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.164	J	0.0761	MDL	0.206	PQL	mg/Kg	J	Z, E, Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.01		0.0822	MDL	0.411	PQL	mg/Kg	J	Q, E
COBALT	6.26		0.0206	MDL	0.103	PQL	mg/Kg	J	E
COPPER	22.0		0.0822	MDL	0.411	PQL	mg/Kg	J	Q
SILVER	0.0963	J	0.0146	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	39.6		0.0226	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0596	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0751	U	0.0751	MDL	0.203	PQL	mg/Kg	UJ	E, Q
ARSENIC	3.03		0.0811	MDL	0.406	PQL	mg/Kg	J	Q, E
COBALT	3.71		0.0203	MDL	0.101	PQL	mg/Kg	J	E
COPPER	12.6		0.0811	MDL	0.406	PQL	mg/Kg	J	Q
SILVER	0.0296	J	0.0144	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	23.6		0.0223	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0883	J	0.0588	MDL	0.406	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0744	U	0.0744	MDL	0.201	PQL	mg/Kg	UJ	E, Q
ARSENIC	3.33		0.0804	MDL	0.402	PQL	mg/Kg	J	Q, E
COBALT	3.57		0.0201	MDL	0.101	PQL	mg/Kg	J	E
COPPER	8.12		0.0804	MDL	0.402	PQL	mg/Kg	J	Q
VANADIUM	27.3		0.0221	MDL	0.101	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-040-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 9:45:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0966	J	0.0583	MDL	0.402	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 10:23:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0747	U	0.0747	MDL	0.202	PQL	mg/Kg	UJ	E, Q
ARSENIC	3.33		0.0808	MDL	0.404	PQL	mg/Kg	J	Q, E
COBALT	3.80		0.0202	MDL	0.101	PQL	mg/Kg	J	E
COPPER	9.88		0.0808	MDL	0.404	PQL	mg/Kg	J	Q
SILVER	0.0309	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	23.9		0.0222	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-046-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 10:23:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.169	J	0.0586	MDL	0.404	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 1:53:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0748	U	0.0748	MDL	0.202	PQL	mg/Kg	UJ	E, Q
ARSENIC	5.98		0.0809	MDL	0.404	PQL	mg/Kg	J	Q, E
COBALT	4.40		0.0202	MDL	0.101	PQL	mg/Kg	J	E
COPPER	6.58		0.0809	MDL	0.404	PQL	mg/Kg	J	Q
SILVER	0.0633	J	0.0144	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	29.2		0.0222	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-047-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 1:53:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0586	MDL	0.404	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-059-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:23:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0715	U	0.0715	MDL	0.193	PQL	mg/Kg	UJ	E, Q
ARSENIC	3.16		0.0773	MDL	0.387	PQL	mg/Kg	J	Q, E
COBALT	3.20		0.0193	MDL	0.0966	PQL	mg/Kg	J	E
COPPER	4.29		0.0773	MDL	0.387	PQL	mg/Kg	J	Q
SILVER	0.0194	J	0.0137	MDL	0.0966	PQL	mg/Kg	J	Z
VANADIUM	19.9		0.0213	MDL	0.0966	PQL	mg/Kg	J	Q

Sample ID: SL-059-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:23:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0842	J	0.0561	MDL	0.387	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0749	U	0.0749	MDL	0.202	PQL	mg/Kg	UJ	E, Q
ARSENIC	3.43		0.0810	MDL	0.405	PQL	mg/Kg	J	Q, E
CADMIUM	0.0810	J	0.0445	MDL	0.101	PQL	mg/Kg	J	Z
COBALT	3.71		0.0202	MDL	0.101	PQL	mg/Kg	J	E
COPPER	5.12		0.0810	MDL	0.405	PQL	mg/Kg	J	Q
SILVER	0.0257	J	0.0144	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	27.2		0.0223	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0776	J	0.0587	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:13:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0733	U	0.0733	MDL	0.198	PQL	mg/Kg	UJ	E, Q
ARSENIC	4.99		0.0792	MDL	0.396	PQL	mg/Kg	J	Q, E
COBALT	4.53		0.0198	MDL	0.0990	PQL	mg/Kg	J	E
COPPER	6.37		0.0792	MDL	0.396	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-067-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 2:13:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0291	J	0.0141	MDL	0.0990	PQL	mg/Kg	J	Z
VANADIUM	31.3		0.0218	MDL	0.0990	PQL	mg/Kg	J	Q

Sample ID: SL-067-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 2:13:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 8:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0809	U	0.0809	MDL	0.219	PQL	mg/Kg	UJ	E, Q
ARSENIC	3.78		0.0874	MDL	0.437	PQL	mg/Kg	J	Q, E
CADMIUM	0.0616	J	0.0481	MDL	0.109	PQL	mg/Kg	J	Z
COBALT	4.77		0.0219	MDL	0.109	PQL	mg/Kg	J	E
COPPER	4.96		0.0874	MDL	0.437	PQL	mg/Kg	J	Q
SILVER	0.0405	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	29.0		0.0240	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-072-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 8:35:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0852	U	0.0852	MDL	0.230	PQL	mg/Kg	UJ	E, Q
ARSENIC	4.40		0.0921	MDL	0.460	PQL	mg/Kg	J	Q, E
CADMIUM	0.0615	J	0.0506	MDL	0.115	PQL	mg/Kg	J	Z
COBALT	5.52		0.0230	MDL	0.115	PQL	mg/Kg	J	E
COPPER	4.72		0.0921	MDL	0.460	PQL	mg/Kg	J	Q
SILVER	0.0611	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	29.7		0.0253	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-072-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 8:35:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0748	J	0.0667	MDL	0.460	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-083-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 3:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0996	J	0.0790	MDL	0.213	PQL	mg/Kg	J	Z, E, Q
ARSENIC	5.80		0.0854	MDL	0.427	PQL	mg/Kg	J	Q, E
COBALT	8.42		0.0213	MDL	0.107	PQL	mg/Kg	J	E
COPPER	13.8		0.0854	MDL	0.427	PQL	mg/Kg	J	Q
SILVER	0.0360	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	41.2		0.0235	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 3:05:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0912	J	0.0619	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA6-SB-9.0-10.0 *Collected:* 7/13/2011 3:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0974	J	0.0810	MDL	0.219	PQL	mg/Kg	J	Z, E, Q
ARSENIC	27.0		0.0875	MDL	0.438	PQL	mg/Kg	J	Q, E
COBALT	8.66		0.0219	MDL	0.109	PQL	mg/Kg	J	E
COPPER	16.1		0.0875	MDL	0.438	PQL	mg/Kg	J	Q
SILVER	0.0416	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	36.6		0.0241	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA6-SB-9.0-10.0 *Collected:* 7/13/2011 3:15:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0891	J	0.0635	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA6-SB-2.5-3.5 *Collected:* 7/13/2011 9:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0773	U	0.0773	MDL	0.209	PQL	mg/Kg	UJ	E, Q
ARSENIC	6.23		0.0835	MDL	0.418	PQL	mg/Kg	J	Q, E
CADMIUM	0.0625	J	0.0459	MDL	0.104	PQL	mg/Kg	J	Z
COBALT	4.95		0.0209	MDL	0.104	PQL	mg/Kg	J	E
COPPER	6.02		0.0835	MDL	0.418	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-116-SA6-SB-2.5-3.5 *Collected:* 7/13/2011 9:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0378	J	0.0148	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	39.3		0.0230	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-118-SA6-SB-10.5-11.5 *Collected:* 7/13/2011 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
ANTIMONY	0.0753	U	0.0753	MDL	0.204	PQL	mg/Kg	UJ	E, Q
ARSENIC	2.14		0.0814	MDL	0.407	PQL	mg/Kg	J	Q, E
COBALT	6.49		0.0204	MDL	0.102	PQL	mg/Kg	J	E
COPPER	13.7		0.0814	MDL	0.407	PQL	mg/Kg	J	Q
SILVER	0.0180	J	0.0144	MDL	0.102	PQL	mg/Kg	J	Z
VANADIUM	30.8		0.0224	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-118-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 1:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0827	U	0.0827	MDL	0.223	PQL	mg/Kg	UJ	E, Q
ARSENIC	4.99		0.0894	MDL	0.447	PQL	mg/Kg	J	Q, E
COBALT	6.55		0.0223	MDL	0.112	PQL	mg/Kg	J	E
COPPER	10.5		0.0894	MDL	0.447	PQL	mg/Kg	J	Q
SILVER	0.0297	J	0.0159	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	45.4		0.0246	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-118-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 1:55:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.137	J	0.0648	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.259		0.0737	MDL	0.199	PQL	mg/Kg	J	E, Q
ARSENIC	3.96		0.0797	MDL	0.398	PQL	mg/Kg	J	Q, E
COBALT	6.41		0.0199	MDL	0.0996	PQL	mg/Kg	J	E
COPPER	18.5		0.0797	MDL	0.398	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	37.7		0.0219	MDL	0.0996	PQL	mg/Kg	J	Q

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.219	J	0.0578	MDL	0.398	PQL	mg/Kg	J	Z

Sample ID: SL-279-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 7:38:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0967	J	0.0763	MDL	0.206	PQL	mg/Kg	J	Z, E, Q
ARSENIC	4.33		0.0825	MDL	0.412	PQL	mg/Kg	J	Q, E
COBALT	4.90		0.0206	MDL	0.103	PQL	mg/Kg	J	E
COPPER	6.97		0.0825	MDL	0.412	PQL	mg/Kg	J	Q
SILVER	0.0684	J	0.0146	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	27.2		0.0227	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-279-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 7:38:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0854	J	0.0598	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-280-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:43:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.117	J	0.0764	MDL	0.206	PQL	mg/Kg	J	Z, E, Q
ARSENIC	5.66		0.0826	MDL	0.413	PQL	mg/Kg	J	Q, E
COBALT	6.41		0.0206	MDL	0.103	PQL	mg/Kg	J	E
COPPER	13.1		0.0826	MDL	0.413	PQL	mg/Kg	J	Q
SILVER	0.0442	J	0.0147	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	35.7		0.0227	MDL	0.103	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-280-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:43:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.109	J	0.0599	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 2:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.157	J	0.0758	MDL	0.205	PQL	mg/Kg	J	Z, E, Q
ARSENIC	14.2		0.0820	MDL	0.410	PQL	mg/Kg	J	Q, E
COBALT	16.1		0.0205	MDL	0.102	PQL	mg/Kg	J	E
COPPER	24.3		0.0820	MDL	0.410	PQL	mg/Kg	J	Q
SILVER	0.0481	J	0.0145	MDL	0.102	PQL	mg/Kg	J	Z
VANADIUM	43.8		0.0225	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 2:30:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0594	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0761	U	0.0761	MDL	0.206	PQL	mg/Kg	UJ	E, Q
ARSENIC	4.89		0.0823	MDL	0.412	PQL	mg/Kg	J	Q, E
COBALT	5.02		0.0206	MDL	0.103	PQL	mg/Kg	J	E
COPPER	8.86		0.0823	MDL	0.412	PQL	mg/Kg	J	Q
SILVER	0.0620	J	0.0146	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	25.1		0.0226	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0670	J	0.0597	MDL	0.412	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-035-SA6-SS-0.0-0.5 **Collected: 7/13/2011 10:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.67	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA6-SS-0.0-0.5 **Collected: 7/13/2011 1:23:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA6-SS-0.0-0.5 **Collected: 7/13/2011 2:43:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA6-SB-4.0-5.0 **Collected: 7/13/2011 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	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA6-SB-9.0-10.0 **Collected: 7/13/2011 8:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.95	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA6-SB-4.0-5.0 **Collected: 7/13/2011 3:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA6-SB-9.0-10.0 **Collected: 7/13/2011 3:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA6-SB-2.5-3.5 **Collected: 7/13/2011 9:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-118-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 1:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-279-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 7:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.64	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0183	J	0.0070	MDL	0.0990	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0184	J	0.0072	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0232	J	0.0070	MDL	0.0996	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0454	J	0.0068	MDL	0.0973	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-067-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0258	J	0.0068	MDL	0.0967	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA6-SB-2.5-3.5 *Collected:* 7/13/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0107	J	0.0073	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA6-SB-10.5-11.5 *Collected:* 7/13/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0593	J	0.0073	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 1:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0186	J	0.0074	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0682	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0599	J	0.0069	MDL	0.0982	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	1.0	J	0.82	MDL	2.5	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-035-SA6-SS-0.0-0.5 **Collected:** 7/13/2011 10:05:00 **Analysis Type:** REA **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.1	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA6-SS-0.0-0.5 **Collected:** 7/13/2011 9:45:00 **Analysis Type:** REA **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.2	J	2.1	MDL	6.2	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA6-SS-0.0-0.5 **Collected:** 7/13/2011 10:23:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.1	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.44	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA6-SS-0.0-0.5 **Collected:** 7/13/2011 1:53:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.1	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA6-SS-0.0-0.5 **Collected:** 7/13/2011 1:23:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.68	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-066-SA6-SS-0.0-0.5 **Collected:** 7/13/2011 2:43:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.95	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA6-SB-4.0-5.0 **Collected:** 7/13/2011 8:25:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.2	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.67	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-118-SA6-SB-4.0-5.0 **Collected:** 7/13/2011 1:55:00 **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)	0.58	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-279-SA6-SS-0.0-0.5 **Collected:** 7/13/2011 7:38:00 **Analysis Type:** REA **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.1	J	2.1	MDL	6.2	PQL	mg/Kg	J	Z

Sample ID: SL-280-SA6-SS-0.0-0.5 **Collected:** 7/12/2011 3:43:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.83	U	0.83	MDL	2.5	PQL	mg/Kg	R	Q

Sample ID: SL-280-SA6-SS-0.0-0.5 **Collected:** 7/12/2011 3:43:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.2	U	5.2	MDL	10	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.2	U	5.2	MDL	10	PQL	mg/Kg	UJ	Q
Propylene glycol	5.2	U	5.2	MDL	10	PQL	mg/Kg	UJ	Q

Sample ID: SL-281-SA6-SS-0.0-0.5 **Collected:** 7/12/2011 2:30:00 **Analysis Type:** REA **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.2	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: SL-300-SA6-SS-0.0-0.5 **Collected:** 7/12/2011 3:05:00 **Analysis Type:** REA **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.6	J	2.1	MDL	6.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	2.6	U	2.6	MDL	2.6	PQL	ug/Kg	UJ	C
gamma-BHC (Lindane)	0.051	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z, *XIII

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.099	J	0.037	MDL	0.17	PQL	ug/Kg	J	Z, S
gamma-BHC (Lindane)	0.46		0.034	MDL	0.17	PQL	ug/Kg	J	S

Sample ID: SL-046-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.3	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.076	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-047-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.045	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.071	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
4,4'-DDE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
4,4'-DDT	0.32	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z, S
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	0.81	U	0.81	MDL	3.4	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.054	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z, S, * XIII
DIELDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.045	U	0.045	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.090	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z, S
ENDRIN KETONE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.073	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z, S
HEPTACHLOR EPOXIDE	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.31	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z, S, * XIII
TOXAPHENE	2.2	U	2.2	MDL	6.7	PQL	ug/Kg	UJ	S

Sample ID: SL-067-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.22		0.036	MDL	0.17	PQL	ug/Kg	J	* XIII
gamma-BHC (Lindane)	0.054	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z, * XIII

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALDRIN	0.073	J	0.068	MDL	0.17	PQL	ug/Kg	J	Z, S, * XIII
Chlordane	8.4		0.82	MDL	3.5	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *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 1254	39		3.3	MDL	17	PQL	ug/Kg	J	* XIII

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-046-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 10:23:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	1.7	U	1.7	MDL	8.6	PQL	ug/Kg	UJ	C
AROCLOR 1248	1.7	U	1.7	MDL	8.6	PQL	ug/Kg	UJ	C
AROCLOR 1254	15		1.7	MDL	8.6	PQL	ug/Kg	J	C
AROCLOR 1260	2.0	U	2.0	MDL	8.6	PQL	ug/Kg	UJ	C
Aroclor 5460	5.0	U	5.0	MDL	17	PQL	ug/Kg	UJ	C

Sample ID: SL-047-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 1:53:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	6.0		0.33	MDL	1.7	PQL	ug/Kg	J	*XIII
Aroclor 5460	2.3	J	1.0	MDL	3.3	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 2:13:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	11		0.33	MDL	1.7	PQL	ug/Kg	J	* XIII
Aroclor 5460	23		1.0	MDL	3.3	PQL	ug/Kg	J	* XIII

Sample ID: SL-072-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 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 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.43	U	0.43	MDL	1.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-072-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 8:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.45	U	0.45	MDL	2.0	PQL	ug/Kg	UJ	C
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-083-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 3:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	1.8	U	1.8	MDL	9.1	PQL	ug/Kg	UJ	C
AROCLOR 1248	1.8	U	1.8	MDL	9.1	PQL	ug/Kg	UJ	C
AROCLOR 1254	68		1.8	MDL	9.1	PQL	ug/Kg	J	C
AROCLOR 1260	2.1	U	2.1	MDL	9.1	PQL	ug/Kg	UJ	C
Aroclor 5460	71		5.3	MDL	18	PQL	ug/Kg	J	C

Sample ID: SL-083-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 3:15:00 ***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 1242	3.6	U	3.6	MDL	19	PQL	ug/Kg	UJ	C
AROCLOR 1248	3.6	U	3.6	MDL	19	PQL	ug/Kg	UJ	C
AROCLOR 1254	250		3.6	MDL	19	PQL	ug/Kg	J	C
AROCLOR 1260	4.3	U	4.3	MDL	19	PQL	ug/Kg	UJ	C
Aroclor 5460	190		11	MDL	36	PQL	ug/Kg	J	C

Sample ID: SL-116-SA6-SB-2.5-3.5 ***Collected:*** 7/13/2011 9:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.42	U	0.42	MDL	1.8	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	C

Sample ID: SL-118-SA6-SB-10.5-11.5 ***Collected:*** 7/13/2011 1:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1254	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	C
AROCLOR 1260	0.41	U	0.41	MDL	1.8	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-118-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 1:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1242	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1248	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1254	4.2		0.37	MDL	1.9	PQL	ug/Kg	J	C
AROCLOR 1260	0.44	U	0.44	MDL	1.9	PQL	ug/Kg	UJ	C
Aroclor 5460	6.4		1.1	MDL	3.7	PQL	ug/Kg	J	C

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	R	S
AROCLOR 1221	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	R	S
AROCLOR 1232	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	R	S
AROCLOR 1242	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	R	S
AROCLOR 1248	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	R	S
AROCLOR 1254	7.3		0.34	MDL	1.7	PQL	ug/Kg	J	S
AROCLOR 1260	0.40	U	0.40	MDL	1.7	PQL	ug/Kg	R	S
Aroclor 1262	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	R	S
Aroclor 1268	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	R	S
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	R	S
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	R	S
Aroclor 5460	5.1		1.0	MDL	3.4	PQL	ug/Kg	J	S

Sample ID: SL-279-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 7:38:00 *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 1242	1.7	U	1.7	MDL	8.8	PQL	ug/Kg	UJ	C
AROCLOR 1248	1.7	U	1.7	MDL	8.8	PQL	ug/Kg	UJ	C
AROCLOR 1254	23		1.7	MDL	8.8	PQL	ug/Kg	J	C
AROCLOR 1260	2.0	U	2.0	MDL	8.8	PQL	ug/Kg	UJ	C
Aroclor 5460	32		5.2	MDL	17	PQL	ug/Kg	J	C

Sample ID: SL-280-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.22		0.077	MDL	0.17	PQL	ug/Kg	J	L, *IX
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L
MCPP	140	J	77	MDL	260	PQL	ug/Kg	UJ	B, * IX

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.076	U	0.076	MDL	0.17	PQL	ug/Kg	UJ	L
2,4-D	8.0		1.2	MDL	3.6	PQL	ug/Kg	J	* IX
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-040-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.078	U	0.078	MDL	0.18	PQL	ug/Kg	UJ	L
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-046-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.076	U	0.076	MDL	0.17	PQL	ug/Kg	UJ	L
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L
MCPA	1000		77	MDL	250	PQL	ug/Kg	J	* IX

Sample ID: SL-047-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.075	U	0.075	MDL	0.17	PQL	ug/Kg	UJ	L
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L
MCPP	380		75	MDL	250	PQL	ug/Kg	UJ	B, *IX

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-059-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.075	U	0.075	MDL	0.17	PQL	ug/Kg	UJ	L
DINOSEB	24	U	24	MDL	24	PQL	ug/Kg	R	L
MCPA	910		76	MDL	250	PQL	ug/Kg	J	* IX

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *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)	0.075	U	0.075	MDL	0.17	PQL	ug/Kg	UJ	L
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-067-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.076	U	0.076	MDL	0.17	PQL	ug/Kg	UJ	L
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.077	U	0.077	MDL	0.17	PQL	ug/Kg	UJ	L
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L
MCPA	110	J	78	MDL	260	PQL	ug/Kg	J	Z, * IX
MCPP	110	J	77	MDL	260	PQL	ug/Kg	UJ	B, * IX

Sample ID: SL-279-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 7:38:00 *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	0.40		0.085	MDL	0.18	PQL	ug/Kg	U	B
2,4,5-TP (Silvex)	0.077	U	0.077	MDL	0.18	PQL	ug/Kg	UJ	L
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-280-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:43:00 *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	0.16	J	0.085	MDL	0.18	PQL	ug/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-280-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:43:00 *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	UJ	L
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	Q, Q, L
MCPA	320		79	MDL	260	PQL	ug/Kg	J	Q, Q, * IX

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.077	U	0.077	MDL	0.17	PQL	ug/Kg	UJ	L
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L
MCPA	110	J	78	MDL	260	PQL	ug/Kg	J	Z, * IX

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.22		0.084	MDL	0.17	PQL	ug/Kg	U	B
2,4,5-TP (Silvex)	0.077	U	0.077	MDL	0.17	PQL	ug/Kg	UJ	L
DICAMBA	0.66	J	0.41	MDL	1.2	PQL	ug/Kg	U	B
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	UJ	C
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
Butylbenzylphthalate	98	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-035-SA6-SS-0.0-0.5** ***Collected:*** **7/13/2011 10:05:00** ***Analysis Type:*** **RES-ACID** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	UJ	C
BENZO(A)PYRENE	35	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	46	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	32	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
CHRYSENE	79	J	17	MDL	170	PQL	ug/Kg	J	Z
Di-n-butylphthalate	94	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	25	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: **SL-040-SA6-SS-0.0-0.5** ***Collected:*** **7/13/2011 9:45:00** ***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	350	U	350	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	520	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3500	PQL	ug/Kg	UJ	C
BENZOIC ACID	170	U	170	MDL	520	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	68	J	17	MDL	350	PQL	ug/Kg	J	Z
Di-n-octylphthalate	140	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: **SL-046-SA6-SS-0.0-0.5** ***Collected:*** **7/13/2011 10:23:00** ***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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: **SL-047-SA6-SS-0.0-0.5** ***Collected:*** **7/13/2011 1:53:00** ***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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	UJ	C
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-047-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	17	MDL	340	PQL	ug/Kg	J	Z
Di-n-octylphthalate	20	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:23:00 *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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
ACENAPHTHENE	29	J	17	MDL	170	PQL	ug/Kg	J	Z
ANTHRACENE	52	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	UJ	C
BENZO(A)PYRENE	150	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	79	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	90	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
CARBAZOLE	36	J	17	MDL	170	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	26	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	79	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	UJ	C
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

Sample ID: SL-067-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:13:00 *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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	UJ	C
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-072-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 8:25:00 ***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-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BENZOIC ACID	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-072-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 8:35:00 ***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	380	U	380	MDL	1200	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	580	PQL	ug/Kg	UJ	L
BENZOIC ACID	190	U	190	MDL	580	PQL	ug/Kg	UJ	L

Sample ID: SL-083-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 3:05:00 ***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	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
ANTHRACENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	150	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	160	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	100	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	89	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZOIC ACID	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
CHRYSENE	170	J	18	MDL	180	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	34	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	77	J	18	MDL	180	PQL	ug/Kg	J	Z
NAPHTHALENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	99	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-083-SA6-SB-9.0-10.0 ***Collected:*** 7/13/2011 3:15:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TRICHLOROPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	I
2,4,6-TRICHLOROPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	I
2,4-DINITROPHENOL	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L, I
2,4-DINITROTOLUENE	36	U	36	MDL	180	PQL	ug/Kg	UJ	I

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-083-SA6-SB-9.0-10.0 *Collected:* 7/13/2011 3:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-DINITROTOLUENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
2-CHLORONAPHTHALENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
2-NITROANILINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	I
3-NITROANILINE	36	U	36	MDL	180	PQL	ug/Kg	UJ	I
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	L, I
4-BROMOPHENYL-PHENYLETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
4-CHLOROPHENYL-PHENYLETHER	36	U	36	MDL	180	PQL	ug/Kg	UJ	I
4-NITROANILINE	73	U	73	MDL	180	PQL	ug/Kg	UJ	I
4-NITROPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	I
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	UJ	I
BENZO(A)ANTHRACENE	31	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I
BENZO(A)PYRENE	44	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I
BENZO(B)FLUORANTHENE	48	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I
BENZO(G,H,I)PERYLENE	36	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I
BENZO(K)FLUORANTHENE	26	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I
BENZOIC ACID	180	U	180	MDL	550	PQL	ug/Kg	UJ	L
Butylbenzylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
CHRYSENE	43	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I
DIBENZOFURAN	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
Diethylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
Dimethylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
FLUORANTHENE	47	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
HEXACHLOROCYCLOPENTADIENE	180	U	180	MDL	550	PQL	ug/Kg	UJ	I
INDENO(1,2,3-CD)PYRENE	33	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I
N-NITROSODIPHENYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	I
PENTACHLOROPHENOL	180	U	180	MDL	550	PQL	ug/Kg	UJ	I
PYRENE	60	J	18	MDL	180	PQL	ug/Kg	J	Z, S, I

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-116-SA6-SB-2.5-3.5 *Collected:* 7/13/2011 9:35:00 *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	360	U	360	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	540	PQL	ug/Kg	UJ	L
BENZOIC ACID	180	U	180	MDL	540	PQL	ug/Kg	UJ	L

Sample ID: SL-118-SA6-SB-10.5-11.5 *Collected:* 7/13/2011 1:45:00 *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	350	U	350	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	180	U	180	MDL	530	PQL	ug/Kg	UJ	L
BENZOIC ACID	180	U	180	MDL	530	PQL	ug/Kg	UJ	L

Sample ID: SL-118-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 1:55:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	370	U	370	MDL	1100	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	L
BENZOIC ACID	190	U	190	MDL	560	PQL	ug/Kg	UJ	L

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* RES-ACID *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	3400	U	3400	MDL	10000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	1700	U	1700	MDL	5100	PQL	ug/Kg	UJ	L
BENZIDINE	12000	U	12000	MDL	34000	PQL	ug/Kg	UJ	C
BENZOIC ACID	1700	U	1700	MDL	5100	PQL	ug/Kg	UJ	L

Sample ID: SL-279-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 7:38:00 *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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	520	PQL	ug/Kg	UJ	L
BENZOIC ACID	170	U	170	MDL	520	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-280-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:43:00 *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	350	U	350	MDL	1000	PQL	ug/Kg	R	Q, L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	520	PQL	ug/Kg	UJ	Q, L
BENZIDINE	1200	U	1200	MDL	3500	PQL	ug/Kg	UJ	Q, C
BENZOIC ACID	170	U	170	MDL	520	PQL	ug/Kg	UJ	L
HEXACHLOROETHANE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 2:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	UJ	C
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
PHENANTHRENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	L
4,6-DINITRO-2-METHYLPHENOL	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	UJ	C
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

Method Category: SVOA

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

Sample ID: EB-SA6-SB-071311 *Collected:* 7/13/2011 12:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.21	J	0.051	MDL	1.0	PQL	ug/L	U	B
Dimethylphthalate	0.051	U	0.051	MDL	1.0	PQL	ug/L	UJ	E
Di-n-butylphthalate	0.28	J	0.051	MDL	1.0	PQL	ug/L	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory:** LL

EDD Filename: PrepDE199_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-030-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 11:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.5	J	1.7	MDL	8.6	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	27		3.4	MDL	8.6	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	23		3.4	MDL	8.6	PQL	ug/Kg	J	C
BENZO(K)FLUORANTHENE	18		3.4	MDL	8.6	PQL	ug/Kg	J	C
BIS(2-ETHYLHEXYL)PHTHALATE	63	J	31	MDL	93	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	5.8	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z, C
Di-n-butylphthalate	47	J	31	MDL	93	PQL	ug/Kg	U	B
Di-n-octylphthalate	32	J	31	MDL	93	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	18		3.4	MDL	8.6	PQL	ug/Kg	J	C

Sample ID: SL-035-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 10:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.6	J	1.7	MDL	8.5	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	3.4	U	3.4	MDL	8.5	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	48	J	30	MDL	91	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	7.8	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z, C
Di-n-octylphthalate	35	J	30	MDL	91	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	9.4		3.4	MDL	8.5	PQL	ug/Kg	J	C
PHENANTHRENE	5.8	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z

Sample ID: SL-040-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 9:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	C
BENZO(B)FLUORANTHENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	5.0		0.69	MDL	1.7	PQL	ug/Kg	J	C
BENZO(K)FLUORANTHENE	0.69	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	C
CHRYSENE	0.80	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, C
Di-n-butylphthalate	8.5	J	6.2	MDL	19	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-046-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.54	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7		0.67	MDL	1.7	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	0.97	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, C
BENZO(K)FLUORANTHENE	3.2		0.67	MDL	1.7	PQL	ug/Kg	J	C
DIBENZO(A,H)ANTHRACENE	0.67	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	C
Di-n-butylphthalate	9.9	J	6.1	MDL	18	PQL	ug/Kg	U	B
Di-n-octylphthalate	6.9	J	6.1	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, C
NAPHTHALENE	0.72	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-047-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, C
BENZO(G,H,I)PERYLENE	0.90	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, C
BENZO(K)FLUORANTHENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, C
Butylbenzylphthalate	6.4	J	6.1	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.67	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	C
Di-n-butylphthalate	8.9	J	6.1	MDL	18	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	0.89	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, C
PHENANTHRENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 1:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.1	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	24		6.0	MDL	18	PQL	ug/Kg	U	B
Butylbenzylphthalate	7.4	J	6.0	MDL	18	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	6.0	MDL	18	PQL	ug/Kg	U	B
Di-n-octylphthalate	7.5	J	6.0	MDL	18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-066-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:43:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.7	J	6.1	MDL	18	PQL	ug/Kg	U	B
Di-n-butylphthalate	8.4	J	6.1	MDL	18	PQL	ug/Kg	U	B
Di-n-octylphthalate	6.2	J	6.1	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 2:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.8	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z, C
BENZO(G,H,I)PERYLENE	4.2	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z, C
BENZO(K)FLUORANTHENE	3.4	U	3.4	MDL	8.4	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	89	J	30	MDL	91	PQL	ug/Kg	U	B
Butylbenzylphthalate	62	J	30	MDL	91	PQL	ug/Kg	J	Z
CHRYSENE	3.3	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.4	U	3.4	MDL	8.4	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	34	J	30	MDL	91	PQL	ug/Kg	J	Z
FLUORANTHENE	6.3	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	3.6	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z, C
PHENANTHRENE	3.4	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
PYRENE	4.6	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-072-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 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
BENZO(A)PYRENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
BENZO(G,H,I)PERYLENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
BENZO(K)FLUORANTHENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
DIBENZO(A,H)ANTHRACENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.7	J	6.7	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C

Sample ID: SL-072-SA6-SB-9.0-10.0 *Collected:* 7/13/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	C
BENZO(G,H,I)PERYLENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-072-SA6-SB-9.0-10.0 *Collected:* 7/13/2011 8:35:00 *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(K)FLUORANTHENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	C
DIBENZO(A,H)ANTHRACENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	7.1	J	6.9	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	C

Sample ID: SL-083-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	80	J	32	MDL	96	PQL	ug/Kg	U	B
Butylbenzylphthalate	51	J	32	MDL	96	PQL	ug/Kg	J	Z
Di-n-butylphthalate	36	J	32	MDL	96	PQL	ug/Kg	U	B
Di-n-octylphthalate	51	J	32	MDL	96	PQL	ug/Kg	J	Z

Sample ID: SL-083-SA6-SB-9.0-10.0 *Collected:* 7/13/2011 3:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	48	J	33	MDL	98	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	3.6	U	3.6	MDL	9.1	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	37	J	33	MDL	98	PQL	ug/Kg	J	Z
PHENANTHRENE	5.9	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-116-SA6-SB-2.5-3.5 *Collected:* 7/13/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	C
BENZO(G,H,I)PERYLENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	C
BENZO(K)FLUORANTHENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	C
DIBENZO(A,H)ANTHRACENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.6	J	6.5	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	C

Sample ID: SL-118-SA6-SB-10.5-11.5 *Collected:* 7/13/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-118-SA6-SB-10.5-11.5 *Collected:* 7/13/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	C
BENZO(K)FLUORANTHENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	C
DIBENZO(A,H)ANTHRACENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	8.3	J	6.3	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	C

Sample ID: SL-118-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 1:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z, C
BENZO(G,H,I)PERYLENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z, C
BENZO(K)FLUORANTHENE	0.86	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z, C
BIS(2-ETHYLHEXYL)PHTHALATE	8.5	J	6.7	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	1.8	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-butylphthalate	10	J	6.7	MDL	20	PQL	ug/Kg	U	B
Di-n-octylphthalate	7.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
PYRENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	17	U	17	MDL	43	PQL	ug/Kg	UJ	C
BENZO(B)FLUORANTHENE	36	J	17	MDL	43	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	33	J	17	MDL	43	PQL	ug/Kg	J	Z, C
BENZO(K)FLUORANTHENE	17	U	17	MDL	43	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	180	J	150	MDL	460	PQL	ug/Kg	U	B
CHRYSENE	23	J	8.5	MDL	43	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	17	U	17	MDL	43	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	170	J	150	MDL	460	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	17	U	17	MDL	43	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-279-SA6-SS-0.0-0.5** ***Collected:*** **7/13/2011 7:38:00** ***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	5.5		0.69	MDL	1.7	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	2.3		0.69	MDL	1.7	PQL	ug/Kg	J	C
BENZO(K)FLUORANTHENE	4.0		0.69	MDL	1.7	PQL	ug/Kg	J	C
BIS(2-ETHYLHEXYL)PHTHALATE	19		6.2	MDL	19	PQL	ug/Kg	U	B
Butylbenzylphthalate	6.3	J	6.2	MDL	19	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.86	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, C
Di-n-butylphthalate	9.1	J	6.2	MDL	19	PQL	ug/Kg	U	B
Di-n-octylphthalate	8.0	J	6.2	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.4		0.69	MDL	1.7	PQL	ug/Kg	J	C
PHENANTHRENE	1.0	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-280-SA6-SS-0.0-0.5** ***Collected:*** **7/12/2011 3:43:00** ***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	3.5	U	3.5	MDL	8.7	PQL	ug/Kg	UJ	C
BENZO(G,H,I)PERYLENE	5.4	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z, C
BENZO(K)FLUORANTHENE	3.5	U	3.5	MDL	8.7	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	31	MDL	94	PQL	ug/Kg	U	B
CHRYSENE	4.5	J	1.7	MDL	8.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.5	U	3.5	MDL	8.7	PQL	ug/Kg	UJ	C
Di-n-butylphthalate	36	J	31	MDL	94	PQL	ug/Kg	U	B
FLUORANTHENE	4.2	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	3.5	U	3.5	MDL	8.7	PQL	ug/Kg	UJ	C

Sample ID: **SL-281-SA6-SS-0.0-0.5** ***Collected:*** **7/12/2011 2:30:00** ***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	3.3	J	1.7	MDL	8.5	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	46		3.4	MDL	8.5	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	35		3.4	MDL	8.5	PQL	ug/Kg	J	C
BENZO(K)FLUORANTHENE	24		3.4	MDL	8.5	PQL	ug/Kg	J	C
BIS(2-ETHYLHEXYL)PHTHALATE	63	J	31	MDL	92	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	7.9	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z, C
Di-n-butylphthalate	36	J	31	MDL	92	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	28		3.4	MDL	8.5	PQL	ug/Kg	J	C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *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(A)PYRENE	3.4	U	3.4	MDL	8.6	PQL	ug/Kg	UJ	C
BENZO(B)FLUORANTHENE	5.2	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.8	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z, C
BENZO(K)FLUORANTHENE	3.4	U	3.4	MDL	8.6	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	36	J	31	MDL	93	PQL	ug/Kg	U	B
CHRYSENE	3.3	J	1.7	MDL	8.6	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.4	U	3.4	MDL	8.6	PQL	ug/Kg	UJ	C
Di-n-butylphthalate	35	J	31	MDL	93	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	3.4	U	3.4	MDL	8.6	PQL	ug/Kg	UJ	C
NAPHTHALENE	4.7	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-030-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	700	J	620	MDL	1500	PQL	ug/Kg	J	Z

Sample ID: SL-278-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	870	J	620	MDL	1500	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: AQ**

Sample ID: EB-SA6-SB-071311 *Collected:* 7/13/2011 12:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	200	U	200	MDL	1000	PQL	ug/L	UJ	H
Isopropanol	200	U	200	MDL	1000	PQL	ug/L	UJ	H
METHANOL	200	U	200	MDL	1000	PQL	ug/L	UJ	H

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-035-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 10:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	UJ	S
p-Terphenyl	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	UJ	S

Sample ID: SL-281-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 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
m-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	R	S
O-TERPHENYL	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	R	S
p-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	R	S

Sample ID: SL-300-SA6-SS-0.0-0.5 *Collected:* 7/12/2011 3:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	Q, S
O-TERPHENYL	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	Q, S
p-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	Q, S

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: EB-SA6-SB-071311 *Collected:* 7/13/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C
METHYLENE CHLORIDE	3	J	2	MDL	5	PQL	ug/L	J	Z
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Sample ID: EB-SA6-SS-071311 *Collected:* 7/13/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: TB-071311 *Collected:* 7/13/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-072-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 8:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.71	U	0.71	MDL	4.1	PQL	ug/Kg	UJ	C
ACETONE	8.6		6.8	MDL	8.2	PQL	ug/Kg	UJ	B, C
METHYLENE CHLORIDE	1.7	J	0.24	MDL	4.1	PQL	ug/Kg	UJ	L, B, F

Sample ID: SL-083-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 3:05:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,1,2-TETRACHLOROETHANE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	S
1,1,1-TRICHLOROETHANE	0.21	U	0.21	MDL	4.1	PQL	ug/Kg	UJ	S
1,1,2,2-TETRACHLOROETHANE	0.24	U	0.24	MDL	4.1	PQL	ug/Kg	UJ	S
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	S
1,1,2-TRICHLOROETHANE	0.28	U	0.28	MDL	4.1	PQL	ug/Kg	UJ	S
1,1-DICHLOROETHANE	0.10	U	0.10	MDL	4.1	PQL	ug/Kg	UJ	S
1,1-DICHLOROETHENE	0.40	U	0.40	MDL	4.1	PQL	ug/Kg	UJ	S
1,1-DICHLOROPROPENE	0.13	U	0.13	MDL	4.1	PQL	ug/Kg	UJ	S
1,2,3-TRICHLOROBENZENE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
1,2,3-TRICHLOROPROPANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	S
1,2,4-TRICHLOROBENZENE	0.19	U	0.19	MDL	4.1	PQL	ug/Kg	UJ	S
1,2,4-TRIMETHYLBENZENE	0.41	U	0.41	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-DIBROMO-3-CHLOROPROPANE	0.72	U	0.72	MDL	4.1	PQL	ug/Kg	UJ	S, C
1,2-Dibromoethane (EDB)	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-DICHLOROBENZENE	0.09	U	0.09	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-DICHLOROETHANE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-DICHLOROPROPANE	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-083-SA6-SB-4.0-5.0 *Collected:* 7/13/2011 3:05:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRIMETHYLBENZENE	0.10	U	0.10	MDL	4.1	PQL	ug/Kg	UJ	S
1,3-DICHLOROBENZENE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
1,3-DICHLOROPROPANE	0.08	U	0.08	MDL	4.1	PQL	ug/Kg	UJ	S
1,4-DICHLOROBENZENE	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
2,2-DICHLOROPROPANE	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	S
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.3	PQL	ug/Kg	UJ	S
2-Chloro-1,1,1-trifluoroethane	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	S
2-CHLOROETHYL VINYL ETHER	0.31	U	0.31	MDL	4.1	PQL	ug/Kg	UJ	S
2-CHLOROTOLUENE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
2-HEXANONE	1.7	U	1.7	MDL	8.3	PQL	ug/Kg	UJ	S
4-CHLOROTOLUENE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.3	PQL	ug/Kg	UJ	S
ACETONE	24		6.9	MDL	8.3	PQL	ug/Kg	UJ	B, S, C
BENZENE	0.10	U	0.10	MDL	4.1	PQL	ug/Kg	UJ	S
BROMOBENZENE	0.13	U	0.13	MDL	4.1	PQL	ug/Kg	UJ	S
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	S
BROMODICHLOROMETHANE	0.08	U	0.08	MDL	4.1	PQL	ug/Kg	UJ	S
BROMOFORM	0.41	U	0.41	MDL	4.1	PQL	ug/Kg	UJ	S
BROMOMETHANE	0.26	U	0.26	MDL	4.1	PQL	ug/Kg	UJ	S
CARBON TETRACHLORIDE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
CHLOROBENZENE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	S
CHLOROETHANE	0.13	U	0.13	MDL	4.1	PQL	ug/Kg	UJ	S
CHLOROFORM	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
CHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	S
Chlorotrifluoroethylene	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	S
CIS-1,2-DICHLOROETHENE	0.20	U	0.20	MDL	4.1	PQL	ug/Kg	UJ	S
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
DIBROMOCHLOROMETHANE	0.21	U	0.21	MDL	4.1	PQL	ug/Kg	UJ	S
DIBROMOMETHANE	0.25	U	0.25	MDL	4.1	PQL	ug/Kg	UJ	S
DICHLORODIFLUOROMETHANE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
ETHYLBENZENE	0.06	U	0.06	MDL	4.1	PQL	ug/Kg	UJ	S
HEXACHLOROBUTADIENE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
ISOPROPYLBENZENE	0.06	U	0.06	MDL	4.1	PQL	ug/Kg	UJ	S
m,p-Xylene	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-083-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 3:05:00 ***Analysis Type:*** RES ***Dilution:*** 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYL TERT-BUTYL ETHER (MTBE)	0.22	U	0.22	MDL	4.1	PQL	ug/Kg	UJ	S
METHYLENE CHLORIDE	1.3	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B, S, F
N-BUTYLBENZENE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
N-PROPYLBENZENE	0.07	U	0.07	MDL	4.1	PQL	ug/Kg	UJ	S
O-XYLENE	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	S
P-ISOPROPYLTOLUENE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	S
SEC-BUTYLBENZENE	0.06	U	0.06	MDL	4.1	PQL	ug/Kg	UJ	S
STYRENE	0.10	U	0.10	MDL	4.1	PQL	ug/Kg	UJ	S
TERT-BUTYLBENZENE	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
TETRACHLOROETHENE	0.21	U	0.21	MDL	4.1	PQL	ug/Kg	UJ	S
TOLUENE	0.11	J	0.08	MDL	4.1	PQL	ug/Kg	UJ	B, S
TRANS-1,2-DICHLOROETHENE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
TRANS-1,3-DICHLOROPROPENE	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	S
TRICHLOROETHENE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
TRICHLOROFLUOROMETHANE	0.30	U	0.30	MDL	4.1	PQL	ug/Kg	UJ	S
VINYL CHLORIDE	0.21	U	0.21	MDL	4.1	PQL	ug/Kg	UJ	S

Sample ID: SL-116-SA6-SB-2.5-3.5 ***Collected:*** 7/13/2011 9:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.75	U	0.75	MDL	4.3	PQL	ug/Kg	UJ	C
ACETONE	9.0		7.2	MDL	8.6	PQL	ug/Kg	UJ	B, C
METHYLENE CHLORIDE	2.2	J	0.26	MDL	4.3	PQL	ug/Kg	UJ	L, B, F

Sample ID: SL-118-SA6-SB-4.0-5.0 ***Collected:*** 7/13/2011 1:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.68	U	0.68	MDL	3.9	PQL	ug/Kg	UJ	C
ACETONE	7.9		6.5	MDL	7.7	PQL	ug/Kg	UJ	B, C
METHYLENE CHLORIDE	1.4	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B, F
TOLUENE	0.10	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-278-SA6-SS-0.0-0.5 **Collected: 7/13/2011 9:10:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1.03**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.74	U	0.74	MDL	4.2	PQL	ug/Kg	UJ	C
ACETONE	7.7	J	7.0	MDL	8.4	PQL	ug/Kg	UJ	B, C
ISOPROPYLBENZENE	0.29	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.3	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.36	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE199

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE199 **Laboratory: LL**
EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB-SA6-SB-071311 (REA)	Sampling To Analysis	8.00	7.00	DAYS	J (all detects) UJ (all non-detects)

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: PrepDE199_v2 **eQAPP Name: CDM_SSFL_110509**

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-SA6-SB-071311(RES)	7/13/2011 12:30:00 PM	BORON CALCIUM STRONTIUM	0.0074 mg/L 0.074 mg/L 0.00047 mg/L	SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-10.5-11.5 SL-118-SA6-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-030-SA6-SS-0.0-0.5(REA)	BORON	2.96 mg/Kg	2.96U mg/Kg
SL-035-SA6-SS-0.0-0.5(REA)	BORON	1.69 mg/Kg	1.69U mg/Kg
SL-040-SA6-SS-0.0-0.5(REA)	BORON	1.77 mg/Kg	1.77U mg/Kg
SL-046-SA6-SS-0.0-0.5(REA)	BORON	0.823 mg/Kg	0.823U mg/Kg
SL-047-SA6-SS-0.0-0.5(REA)	BORON	1.00 mg/Kg	1.00U mg/Kg
SL-059-SA6-SS-0.0-0.5(REA)	BORON	0.632 mg/Kg	0.632U mg/Kg
SL-066-SA6-SS-0.0-0.5(REA)	BORON	1.02 mg/Kg	1.02U mg/Kg
SL-067-SA6-SS-0.0-0.5(REA)	BORON	1.31 mg/Kg	1.31U mg/Kg
SL-072-SA6-SB-4.0-5.0(REA)	BORON	1.05 mg/Kg	1.05U mg/Kg
SL-072-SA6-SB-9.0-10.0(REA)	BORON	0.772 mg/Kg	0.772U mg/Kg
SL-116-SA6-SB-2.5-3.5(REA)	BORON	0.422 mg/Kg	0.422U mg/Kg
SL-278-SA6-SS-0.0-0.5(REA)	BORON	1.63 mg/Kg	1.63U mg/Kg
SL-279-SA6-SS-0.0-0.5(REA)	BORON	2.43 mg/Kg	2.43U mg/Kg
SL-280-SA6-SS-0.0-0.5(REA)	BORON	2.91 mg/Kg	2.91U mg/Kg
SL-300-SA6-SS-0.0-0.5(REA)	BORON	1.78 mg/Kg	1.78U mg/Kg

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-SA6-SB-071311(RES)	7/13/2011 12:30:00 PM	METHYLENE CHLORIDE	3 ug/L	SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-10.5-11.5 SL-118-SA6-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-072-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.1U ug/Kg
SL-083-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.1U ug/Kg
SL-116-SA6-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.3U ug/Kg
SL-118-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	3.9U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P19648BB220643	7/19/2011 6:43:00 AM	BORON STRONTIUM	0.0043 mg/L 0.00029 mg/L	EB-SA6-SB-071311

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-SA6-SB-071311(RES)	BORON	0.0074 mg/L	0.0074U mg/L
EB-SA6-SB-071311(RES)	STRONTIUM	0.00047 mg/L	0.00047U mg/L

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P19908BB222248	7/24/2011 10:48:00 PM	IRON MANGANESE PHOSPHORUS STRONTIUM TIN TITANIUM Zirconium	4.55 mg/Kg 0.0471 mg/Kg 1.56 mg/Kg 0.0333 mg/Kg 1.55 mg/Kg 0.0765 mg/Kg 0.517 mg/Kg	SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-10.5-11.5 SL-118-SA6-SB-4.0-5.0 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5
P19908BB222332	7/25/2011 11:32:00 PM	CALCIUM MAGNESIUM	6.19 mg/Kg 0.739 mg/Kg	SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-10.5-11.5 SL-118-SA6-SB-4.0-5.0 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-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-030-SA6-SS-0.0-0.5(REA)	TIN	2.40 mg/Kg	2.40U mg/Kg

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

Method Blank Outlier Report

Lab Reporting Batch ID: DE199 Laboratory: LL

EDD Filename: DE199_v2. 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-035-SA6-SS-0.0-0.5(REA)	TIN	1.93 mg/Kg	1.93U mg/Kg
SL-035-SA6-SS-0.0-0.5(REA)	Zirconium	2.28 mg/Kg	2.28U mg/Kg
SL-040-SA6-SS-0.0-0.5(REA)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-040-SA6-SS-0.0-0.5(REA)	Zirconium	2.41 mg/Kg	2.41U mg/Kg
SL-046-SA6-SS-0.0-0.5(REA)	TIN	1.80 mg/Kg	1.80U mg/Kg
SL-046-SA6-SS-0.0-0.5(REA)	Zirconium	1.44 mg/Kg	1.44U mg/Kg
SL-047-SA6-SS-0.0-0.5(REA)	TIN	2.30 mg/Kg	2.30U mg/Kg
SL-047-SA6-SS-0.0-0.5(REA)	Zirconium	1.64 mg/Kg	1.64U mg/Kg
SL-059-SA6-SS-0.0-0.5(REA)	TIN	2.06 mg/Kg	2.06U mg/Kg
SL-059-SA6-SS-0.0-0.5(REA)	Zirconium	1.60 mg/Kg	1.60U mg/Kg
SL-066-SA6-SS-0.0-0.5(REA)	TIN	2.05 mg/Kg	2.05U mg/Kg
SL-066-SA6-SS-0.0-0.5(REA)	Zirconium	1.84 mg/Kg	1.84U mg/Kg
SL-067-SA6-SS-0.0-0.5(REA)	TIN	2.24 mg/Kg	2.24U mg/Kg
SL-067-SA6-SS-0.0-0.5(REA)	Zirconium	2.06 mg/Kg	2.06U mg/Kg
SL-072-SA6-SB-4.0-5.0(REA)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-072-SA6-SB-4.0-5.0(REA)	Zirconium	2.35 mg/Kg	2.35U mg/Kg
SL-072-SA6-SB-9.0-10.0(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-083-SA6-SB-4.0-5.0(REA)	TIN	2.20 mg/Kg	2.20U mg/Kg
SL-083-SA6-SB-9.0-10.0(REA)	TIN	2.52 mg/Kg	2.52U mg/Kg
SL-116-SA6-SB-2.5-3.5(REA)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-118-SA6-SB-10.5-11.5(REA)	TIN	1.86 mg/Kg	1.86U mg/Kg
SL-118-SA6-SB-10.5-11.5(REA)	Zirconium	1.21 mg/Kg	1.21U mg/Kg
SL-118-SA6-SB-4.0-5.0(REA)	TIN	1.79 mg/Kg	1.79U mg/Kg
SL-278-SA6-SS-0.0-0.5(REA)	TIN	2.19 mg/Kg	2.19U mg/Kg
SL-278-SA6-SS-0.0-0.5(REA2)	Zirconium	1.48 mg/Kg	1.48U mg/Kg
SL-279-SA6-SS-0.0-0.5(REA)	TIN	1.98 mg/Kg	1.98U mg/Kg
SL-279-SA6-SS-0.0-0.5(REA)	Zirconium	1.56 mg/Kg	1.56U mg/Kg
SL-280-SA6-SS-0.0-0.5(REA)	TIN	2.18 mg/Kg	2.18U mg/Kg
SL-281-SA6-SS-0.0-0.5(REA)	TIN	2.17 mg/Kg	2.17U mg/Kg
SL-281-SA6-SS-0.0-0.5(REA)	Zirconium	1.32 mg/Kg	1.32U mg/Kg
SL-300-SA6-SS-0.0-0.5(REA)	TIN	1.96 mg/Kg	1.96U mg/Kg
SL-300-SA6-SS-0.0-0.5(REA)	Zirconium	1.58 mg/Kg	1.58U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P19926AB220104A	7/23/2011 1:04:00 AM	LEAD	0.0203 mg/Kg	SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-10.5-11.5 SL-118-SA6-SB-4.0-5.0 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P01012AB240100A	7/23/2011 1:00:00 AM	2,4,5-T DICAMBA MCPP	0.090 ug/Kg 1.2 ug/Kg 470 ug/Kg	SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-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-030-SA6-SS-0.0-0.5(RES)	MCPP	140 ug/Kg	260U ug/Kg
SL-047-SA6-SS-0.0-0.5(RES)	MCPP	380 ug/Kg	380U ug/Kg
SL-278-SA6-SS-0.0-0.5(RES)	MCPP	110 ug/Kg	260U ug/Kg
SL-279-SA6-SS-0.0-0.5(RES)	2,4,5-T	0.40 ug/Kg	0.40U ug/Kg
SL-280-SA6-SS-0.0-0.5(RES)	2,4,5-T	0.16 ug/Kg	0.18U ug/Kg
SL-300-SA6-SS-0.0-0.5(RES)	2,4,5-T	0.22 ug/Kg	0.22U ug/Kg
SL-300-SA6-SS-0.0-0.5(RES)	DICAMBA	0.66 ug/Kg	1.2U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB16B211206A	7/14/2011 12:06:00 PM	ACETONE	9.3 ug/Kg	SL-072-SA6-SB-4.0-5.0
		CHLOROFORM	0.14 ug/Kg	SL-083-SA6-SB-4.0-5.0
		METHYLENE CHLORIDE	2.1 ug/Kg	SL-116-SA6-SB-2.5-3.5
		TOLUENE	0.11 ug/Kg	SL-118-SA6-SB-4.0-5.0
				SL-278-SA6-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-072-SA6-SB-4.0-5.0(RES)	ACETONE	8.6 ug/Kg	8.6U ug/Kg
SL-072-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.1U ug/Kg
SL-083-SA6-SB-4.0-5.0(RES)	ACETONE	24 ug/Kg	24U ug/Kg
SL-083-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.1U ug/Kg
SL-083-SA6-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.1U ug/Kg
SL-116-SA6-SB-2.5-3.5(RES)	ACETONE	9.0 ug/Kg	9.0U ug/Kg
SL-116-SA6-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.3U ug/Kg
SL-118-SA6-SB-4.0-5.0(RES)	ACETONE	7.9 ug/Kg	7.9U ug/Kg
SL-118-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	3.9U ug/Kg
SL-118-SA6-SB-4.0-5.0(RES)	TOLUENE	0.10 ug/Kg	3.9U ug/Kg
SL-278-SA6-SS-0.0-0.5(RES)	ACETONE	7.7 ug/Kg	8.4U ug/Kg
SL-278-SA6-SS-0.0-0.5(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.2U ug/Kg
SL-278-SA6-SS-0.0-0.5(RES)	TOLUENE	0.36 ug/Kg	4.2U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWL19B261146	8/1/2011 11:46:00 AM	BENZOIC ACID	83 ug/L	EB-SA6-SB-071311

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWH19B260751	7/18/2011 7:51:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	0.21 ug/L	EB-SA6-SB-071311
		Di-n-butylphthalate	0.22 ug/L	

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-SA6-SB-071311(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.21 ug/L	1.0U ug/L
EB-SA6-SB-071311(RES)	Di-n-butylphthalate	0.28 ug/L	1.0U ug/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLL20B260754	7/22/2011 7:54:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	6.5 ug/Kg 7.9 ug/Kg	SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-10.5-11.5 SL-118-SA6-SB-4.0-5.0 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-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-030-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	63 ug/Kg	93U ug/Kg
SL-030-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	47 ug/Kg	93U ug/Kg
SL-035-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	48 ug/Kg	91U ug/Kg
SL-040-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	8.5 ug/Kg	19U ug/Kg
SL-046-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	9.9 ug/Kg	18U ug/Kg
SL-047-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	8.9 ug/Kg	18U ug/Kg
SL-059-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	24U ug/Kg
SL-059-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	10 ug/Kg	18U ug/Kg
SL-066-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	9.7 ug/Kg	18U ug/Kg
SL-066-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	8.4 ug/Kg	18U ug/Kg
SL-067-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	89 ug/Kg	91U ug/Kg
SL-083-SA6-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	80 ug/Kg	96U ug/Kg
SL-083-SA6-SB-4.0-5.0(RES)	Di-n-butylphthalate	36 ug/Kg	96U ug/Kg
SL-083-SA6-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	48 ug/Kg	98U ug/Kg
SL-118-SA6-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	8.5 ug/Kg	20U ug/Kg
SL-118-SA6-SB-4.0-5.0(RES)	Di-n-butylphthalate	10 ug/Kg	20U ug/Kg
SL-278-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	180 ug/Kg	460U ug/Kg
SL-279-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	19U ug/Kg
SL-279-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	9.1 ug/Kg	19U ug/Kg
SL-280-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	38 ug/Kg	94U ug/Kg
SL-280-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	36 ug/Kg	94U ug/Kg
SL-281-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	63 ug/Kg	92U ug/Kg
SL-281-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	36 ug/Kg	92U ug/Kg
SL-300-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	36 ug/Kg	93U ug/Kg
SL-300-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	35 ug/Kg	93U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-280-SA6-SS-0.0-0.5MS SL-280-SA6-SS-0.0-0.5MSD (SL-280-SA6-SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	22 49 57	30 - -	59.00-109.00 63.00-107.00 63.00-107.00	31 (20.00) 34 (20.00) 33 (20.00)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	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-280-SA6-SS-0.0-0.5MS SL-280-SA6-SS-0.0-0.5MSD (SL-280-SA6-SS-0.0-0.5)	4,4'-DDE DIELDRIN ENDOSULFAN II ENDRIN gamma-BHC (Lindane) HEPTACHLOR EPOXIDE	358 366 172 164 - 385	363 404 200 173 150 355	18.00-161.00 19.00-154.00 28.00-154.00 11.00-149.00 10.00-140.00 13.00-157.00	- - - - 62 (50.00) -	4,4'-DDE DIELDRIN ENDOSULFAN II ENDRIN gamma-BHC (Lindane) HEPTACHLOR EPOXIDE	No Qual, Diluted Out
SL-280-SA6-SS-0.0-0.5MS SL-280-SA6-SS-0.0-0.5MSD (SL-280-SA6-SS-0.0-0.5)	4,4'-DDD 4,4'-DDT ALDRIN BETA-BHC ENDOSULFAN I ENDOSULFAN SULFATE HEPTACHLOR	0 -1369 0 0 0 0 0	0 -1292 0 - 0 0 0	16.00-163.00 10.00-176.00 16.00-126.00 14.00-147.00 16.00-137.00 21.00-160.00 13.00-126.00	- - - 200 (50.00) - - -	4,4'-DDD 4,4'-DDT ALDRIN BETA-BHC ENDOSULFAN I ENDOSULFAN SULFATE HEPTACHLOR	No Qual, Diluted Out

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-280-SA6-SS-0.0-0.5MSD (SL-280-SA6-SS-0.0-0.5)	2,4,5-TP (Silvex) DICHLOROPROP	- -	- -	24.00-141.00 33.00-178.00	82 (35.00) 60 (50.00)	2,4,5-TP (Silvex) DICHLOROPROP	J(all detects)
SL-280-SA6-SS-0.0-0.5MS SL-280-SA6-SS-0.0-0.5MSD (SL-280-SA6-SS-0.0-0.5)	DINOSEB MCPA	0 -10	6 2	10.00-46.00 10.00-213.00	200 (35.00) -	DINOSEB MCPA	J(all detects) R(all non-detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-281-SA6-SS-0.0-0.5MS SL-281-SA6-SS-0.0-0.5MSD (SL-281-SA6-SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	372 563	273 998	29.00-146.00 39.00-149.00	- 56 (50.00)	AROCLOR 1016 AROCLOR 1260	No Qual, Diluted Out

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-300-SA6-SS-0.0-0.5MS	m-Terphenyl	31	56	75.00-125.00	57 (20.00)	m-Terphenyl	J(all detects) UJ(all non-detects)
SL-300-SA6-SS-0.0-0.5MSD	O-TERPHENYL	36	64	75.00-125.00	57 (20.00)	O-TERPHENYL	
(SL-300-SA6-SS-0.0-0.5)	p-Terphenyl	34	60	75.00-125.00	57 (20.00)	p-Terphenyl	

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-280-SA6-SS-0.0-0.5MS	EFH (C12-C14)	144	126	49.00-123.00	-	EFH (C12-C14)	J(all detects)
SL-280-SA6-SS-0.0-0.5MSD							
(SL-280-SA6-SS-0.0-0.5)							
SL-280-SA6-SS-0.0-0.5MS	EFH (C21-C30)	-327	-1170	49.00-123.00	56 (20.00)	EFH (C21-C30)	J(all detects) R(all non-detects) EFH (C21-C30) and (C30-C40), No Qual, >4x
SL-280-SA6-SS-0.0-0.5MSD	EFH (C30-C40)	-511	-105	49.00-123.00	-	EFH (C30-C40)	
(SL-280-SA6-SS-0.0-0.5)	EFH (C8-C11)	-	0	49.00-123.00	200 (20.00)	EFH (C8-C11)	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-280-SA6-SS-0.0-0.5MS	ARSENIC	127	-	75.00-125.00	-	ARSENIC	J(all detects)
(SL-030-SA6-SS-0.0-0.5							
SL -035-SA6-SS-0.0-0.5							
SL -040-SA6-SS-0.0-0.5							
SL -046-SA6-SS-0.0-0.5							
SL -047-SA6-SS-0.0-0.5							
SL -059-SA6-SS-0.0-0.5							
SL -066-SA6-SS-0.0-0.5							
SL -067-SA6-SS-0.0-0.5							
SL -072-SA6-SB-4.0-5.0							
SL -072-SA6-SB-9.0-10.0							
SL -083-SA6-SB-4.0-5.0							
SL -083-SA6-SB-9.0-10.0							
SL -116-SA6-SB-2.5-3.5							
SL -118-SA6-SB-10.5-11.5							
SL -118-SA6-SB-4.0-5.0							
SL -278-SA6-SS-0.0-0.5							
SL -279-SA6-SS-0.0-0.5							
SL -280-SA6-SS-0.0-0.5							
SL -281-SA6-SS-0.0-0.5							
SL -300-SA6-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **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-280-SA6-SS-0.0-0.5MS **SL-280-SA6-SS-0.0-0.5MSD** (SL-030-SA6-SS-0.0-0.5 SL -035-SA6-SS-0.0-0.5 SL -040-SA6-SS-0.0-0.5 SL -046-SA6-SS-0.0-0.5 SL -047-SA6-SS-0.0-0.5 SL -059-SA6-SS-0.0-0.5 SL -066-SA6-SS-0.0-0.5 SL -067-SA6-SS-0.0-0.5 SL -072-SA6-SB-4.0-5.0 SL -072-SA6-SB-9.0-10.0 SL -083-SA6-SB-4.0-5.0 SL -083-SA6-SB-9.0-10.0 SL -116-SA6-SB-2.5-3.5 SL -118-SA6-SB-10.5-11.5 SL -118-SA6-SB-4.0-5.0 SL -278-SA6-SS-0.0-0.5 SL -279-SA6-SS-0.0-0.5 SL -280-SA6-SS-0.0-0.5 SL -281-SA6-SS-0.0-0.5 SL -300-SA6-SS-0.0-0.5)	ANTIMONY	22	14	75.00-125.00	28 (20.00)	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike = 102%
SL-280-SA6-SS-0.0-0.5MS **SL-280-SA6-SS-0.0-0.5MSD** (SL-030-SA6-SS-0.0-0.5 SL -035-SA6-SS-0.0-0.5 SL -040-SA6-SS-0.0-0.5 SL -046-SA6-SS-0.0-0.5 SL -047-SA6-SS-0.0-0.5 SL -059-SA6-SS-0.0-0.5 SL -066-SA6-SS-0.0-0.5 SL -067-SA6-SS-0.0-0.5 SL -072-SA6-SB-4.0-5.0 SL -072-SA6-SB-9.0-10.0 SL -083-SA6-SB-4.0-5.0 SL -083-SA6-SB-9.0-10.0 SL -116-SA6-SB-2.5-3.5 SL -118-SA6-SB-10.5-11.5 SL -118-SA6-SB-4.0-5.0 SL -278-SA6-SS-0.0-0.5 SL -279-SA6-SS-0.0-0.5 SL -280-SA6-SS-0.0-0.5 SL -281-SA6-SS-0.0-0.5 SL -300-SA6-SS-0.0-0.5)	COPPER VANADIUM	- 74	65 -	75.00-125.00 75.00-125.00	- -	COPPER VANADIUM	J(all detects) UJ(all non-detects)
SL-280-SA6-SS-0.0-0.5MS **SL-280-SA6-SS-0.0-0.5MSD** (SL-030-SA6-SS-0.0-0.5 SL -035-SA6-SS-0.0-0.5 SL -040-SA6-SS-0.0-0.5 SL -046-SA6-SS-0.0-0.5 SL -047-SA6-SS-0.0-0.5 SL -059-SA6-SS-0.0-0.5 SL -066-SA6-SS-0.0-0.5 SL -067-SA6-SS-0.0-0.5 SL -072-SA6-SB-4.0-5.0 SL -072-SA6-SB-9.0-10.0 SL -083-SA6-SB-4.0-5.0 SL -083-SA6-SB-9.0-10.0 SL -116-SA6-SB-2.5-3.5 SL -118-SA6-SB-10.5-11.5 SL -118-SA6-SB-4.0-5.0 SL -278-SA6-SS-0.0-0.5 SL -279-SA6-SS-0.0-0.5 SL -280-SA6-SS-0.0-0.5 SL -281-SA6-SS-0.0-0.5 SL -300-SA6-SS-0.0-0.5)	BARIUM	164	160	75.00-125.00	-	BARIUM	No Qual, >4x

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

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **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-059-SA6-SS-0.0-0.5MS	ALUMINUM	807	999	75.00-125.00	-	ALUMINUM	
SL-059-SA6-SS-0.0-0.5MSD	MAGNESIUM	-	171	75.00-125.00	-	MAGNESIUM	
(SL-030-SA6-SS-0.0-0.5	TITANIUM	164	213	75.00-125.00	-	TITANIUM	
SL -035-SA6-SS-0.0-0.5							
SL -040-SA6-SS-0.0-0.5							
SL -046-SA6-SS-0.0-0.5							
SL -047-SA6-SS-0.0-0.5							
SL -059-SA6-SS-0.0-0.5							
SL -066-SA6-SS-0.0-0.5							
SL -067-SA6-SS-0.0-0.5							
SL -072-SA6-SB-4.0-5.0							
SL -072-SA6-SB-9.0-10.0							No Qual, >4x
SL -083-SA6-SB-4.0-5.0							
SL -083-SA6-SB-9.0-10.0							
SL -116-SA6-SB-2.5-3.5							
SL -118-SA6-SB-10.5-11.5							
SL -118-SA6-SB-4.0-5.0							
SL -278-SA6-SS-0.0-0.5							
SL -279-SA6-SS-0.0-0.5							
SL -280-SA6-SS-0.0-0.5							
SL -281-SA6-SS-0.0-0.5							
SL -300-SA6-SS-0.0-0.5)							
SL-059-SA6-SS-0.0-0.5MS	CALCIUM	-66	-147	75.00-125.00	-	CALCIUM	
SL-059-SA6-SS-0.0-0.5MSD	IRON	-34	1073	75.00-125.00	-	IRON	
(SL-030-SA6-SS-0.0-0.5							
SL -035-SA6-SS-0.0-0.5							
SL -040-SA6-SS-0.0-0.5							
SL -046-SA6-SS-0.0-0.5							
SL -047-SA6-SS-0.0-0.5							
SL -059-SA6-SS-0.0-0.5							
SL -066-SA6-SS-0.0-0.5							
SL -067-SA6-SS-0.0-0.5							
SL -072-SA6-SB-4.0-5.0							
SL -072-SA6-SB-9.0-10.0							No Qual, >4x
SL -083-SA6-SB-4.0-5.0							
SL -083-SA6-SB-9.0-10.0							
SL -116-SA6-SB-2.5-3.5							
SL -118-SA6-SB-10.5-11.5							
SL -118-SA6-SB-4.0-5.0							
SL -278-SA6-SS-0.0-0.5							
SL -279-SA6-SS-0.0-0.5							
SL -280-SA6-SS-0.0-0.5							
SL -281-SA6-SS-0.0-0.5							
SL -300-SA6-SS-0.0-0.5)							
SL-059-SA6-SS-0.0-0.5MS	MANGANESE	70	-	75.00-125.00	-	MANGANESE	
SL-059-SA6-SS-0.0-0.5MSD	PHOSPHORUS	233	-	75.00-125.00	28 (20.00)	PHOSPHORUS	
(SL-030-SA6-SS-0.0-0.5							
SL -035-SA6-SS-0.0-0.5							
SL -040-SA6-SS-0.0-0.5							
SL -046-SA6-SS-0.0-0.5							
SL -047-SA6-SS-0.0-0.5							
SL -059-SA6-SS-0.0-0.5							
SL -066-SA6-SS-0.0-0.5							J(all detects)
SL -067-SA6-SS-0.0-0.5							UJ(all non-detects)
SL -072-SA6-SB-4.0-5.0							
SL -072-SA6-SB-9.0-10.0							
SL -083-SA6-SB-4.0-5.0							
SL -083-SA6-SB-9.0-10.0							
SL -116-SA6-SB-2.5-3.5							
SL -118-SA6-SB-10.5-11.5							Mn, No Qual, >4x
SL -118-SA6-SB-4.0-5.0							
SL -278-SA6-SS-0.0-0.5							
SL -279-SA6-SS-0.0-0.5							
SL -280-SA6-SS-0.0-0.5							
SL -281-SA6-SS-0.0-0.5							
SL -300-SA6-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **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-280-SA6-SS-0.0-0.5MS SL-280-SA6-SS-0.0-0.5MSD (SL-280-SA6-SS-0.0-0.5)	2,4-DINITROPHENOL	0	0	20.00-143.00	-	2,4-DINITROPHENOL	J(all detects) R(all non-detects)
SL-280-SA6-SS-0.0-0.5MS SL-280-SA6-SS-0.0-0.5MSD (SL-280-SA6-SS-0.0-0.5)	4,6-DINITRO-2-METHYLPHENOL BENZIDINE HEXACHLOROETHANE	10 34 55	- 32 -	24.00-116.00 35.00-141.00 57.00-109.00	- - -	4,6-DINITRO-2-METHYLPHEN BENZIDINE HEXACHLOROETHANE	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-280-SA6-SS-0.0-0.5MS SL-280-SA6-SS-0.0-0.5MSD (SL-280-SA6-SS-0.0-0.5)	Di-n-octylphthalate	201	201	40.00-192.00	-	Di-n-octylphthalate	No Qual, Diluted Out

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-059-SA6-SS-0.0-0.5DUP	BORON	50	20.00	
(SL-030-SA6-SS-0.0-0.5	CALCIUM	43	20.00	
SL -035-SA6-SS-0.0-0.5				
SL -040-SA6-SS-0.0-0.5				
SL -046-SA6-SS-0.0-0.5				
SL -047-SA6-SS-0.0-0.5				
SL -059-SA6-SS-0.0-0.5				
SL -066-SA6-SS-0.0-0.5				J (all detects) UJ (all non-detects)
SL -067-SA6-SS-0.0-0.5				
SL -072-SA6-SB-4.0-5.0				
SL -072-SA6-SB-9.0-10.0				
SL -083-SA6-SB-4.0-5.0				
SL -083-SA6-SB-9.0-10.0				
SL -116-SA6-SB-2.5-3.5				B, No Qual, OK by Difference
SL -118-SA6-SB-10.5-11.5				
SL -118-SA6-SB-4.0-5.0				
SL -278-SA6-SS-0.0-0.5				
SL -279-SA6-SS-0.0-0.5				
SL -280-SA6-SS-0.0-0.5				
SL -281-SA6-SS-0.0-0.5				
SL -300-SA6-SS-0.0-0.5)				

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-278-SA6-SS-0.0-0.5DUP	FLUORIDE	200	20.00	
(SL-046-SA6-SS-0.0-0.5	Nitrate-NO3	25	20.00	
SL -072-SA6-SB-4.0-5.0				
SL -072-SA6-SB-9.0-10.0				
SL -083-SA6-SB-4.0-5.0				
SL -083-SA6-SB-9.0-10.0				No Qual, OK by Difference
SL -116-SA6-SB-2.5-3.5				
SL -118-SA6-SB-10.5-11.5				
SL -118-SA6-SB-4.0-5.0				
SL -278-SA6-SS-0.0-0.5				
SL -279-SA6-SS-0.0-0.5)				

Method: 9012B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-030-SA6-SS-0.0-0.5DUP	CYANIDE	200	20.00	
(SL-030-SA6-SS-0.0-0.5				
SL -035-SA6-SS-0.0-0.5				
SL -046-SA6-SS-0.0-0.5				No Qual, OK by Difference
SL -047-SA6-SS-0.0-0.5				
SL -066-SA6-SS-0.0-0.5				
SL -067-SA6-SS-0.0-0.5				
SL -278-SA6-SS-0.0-0.5)				

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

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-280-SA6-SS-0.0-0.5DUP (SL-030-SA6-SS-0.0-0.5 SL -035-SA6-SS-0.0-0.5 SL -040-SA6-SS-0.0-0.5 SL -047-SA6-SS-0.0-0.5 SL -059-SA6-SS-0.0-0.5 SL -066-SA6-SS-0.0-0.5 SL -067-SA6-SS-0.0-0.5 SL -280-SA6-SS-0.0-0.5 SL -281-SA6-SS-0.0-0.5 SL -300-SA6-SS-0.0-0.5)	Nitrate-NO3	22	20.00	No Qual, OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-280-SA6-SS-0.0-0.5DUP	ANTIMONY	40	20.00	
(SL-030-SA6-SS-0.0-0.5	ARSENIC	33	20.00	
SL -035-SA6-SS-0.0-0.5	CADMIUM	35	20.00	
SL -040-SA6-SS-0.0-0.5	COBALT	34	20.00	
SL -046-SA6-SS-0.0-0.5				
SL -047-SA6-SS-0.0-0.5				
SL -059-SA6-SS-0.0-0.5				J(all detects) UJ(all non-detects)
SL -066-SA6-SS-0.0-0.5				
SL -067-SA6-SS-0.0-0.5				
SL -072-SA6-SB-4.0-5.0				
SL -072-SA6-SB-9.0-10.0				
SL -083-SA6-SB-4.0-5.0				
SL -083-SA6-SB-9.0-10.0				Sb, Cd, No Qual, OK by Difference
SL -116-SA6-SB-2.5-3.5				
SL -118-SA6-SB-10.5-11.5				
SL -118-SA6-SB-4.0-5.0				
SL -278-SA6-SS-0.0-0.5				
SL -279-SA6-SS-0.0-0.5				
SL -280-SA6-SS-0.0-0.5				
SL -281-SA6-SS-0.0-0.5				
SL -300-SA6-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-281-SA6-SS-0.0-0.5DUP (SL-030-SA6-SS-0.0-0.5 SL -035-SA6-SS-0.0-0.5 SL -040-SA6-SS-0.0-0.5 SL -046-SA6-SS-0.0-0.5 SL -047-SA6-SS-0.0-0.5 SL -059-SA6-SS-0.0-0.5 SL -066-SA6-SS-0.0-0.5 SL -067-SA6-SS-0.0-0.5 SL -072-SA6-SB-4.0-5.0 SL -072-SA6-SB-9.0-10.0 SL -083-SA6-SB-4.0-5.0 SL -083-SA6-SB-9.0-10.0 SL -116-SA6-SB-2.5-3.5 SL -118-SA6-SB-10.5-11.5 SL -118-SA6-SB-4.0-5.0 SL -278-SA6-SS-0.0-0.5 SL -279-SA6-SS-0.0-0.5 SL -280-SA6-SS-0.0-0.5 SL -281-SA6-SS-0.0-0.5 SL -300-SA6-SS-0.0-0.5)	HEXAVALENT CHROMIUM	32	20.00	No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 Laboratory: LL

EDD Filename: DE199_v2. eQAPP Name: CDM_SSFL_110509

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11990AQ242235A P11990AY242318A (EB-SA6-SB-071311)	PETN	121	125	80.00-120.00	-	PETN	J (all detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WHLCSY260855 (EB-SA6-SB-071311)	ACENAPHTHYLENE FLUORENE	- -	112 115	70.00-110.00 75.00-114.00	- -	ACENAPHTHYLENE FLUORENE	J(all detects)
P7WHLCSY260855 (EB-SA6-SB-071311)	Dimethylphthalate	-	-	40.00-119.00	45 (30.00)	Dimethylphthalate	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WLLCSY261236 (EB-SA6-SB-071311)	2,4,5-TRICHLOROPHENOL	-	109	79.00-107.00	-	2,4,5-TRICHLOROPHENOL	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12012AQ240127A (SL-030-SA6-SS-0.0-0.5 SL -035-SA6-SS-0.0-0.5 SL -040-SA6-SS-0.0-0.5 SL -046-SA6-SS-0.0-0.5 SL -047-SA6-SS-0.0-0.5 SL -059-SA6-SS-0.0-0.5 SL -066-SA6-SS-0.0-0.5 SL -067-SA6-SS-0.0-0.5 SL -278-SA6-SS-0.0-0.5 SL -279-SA6-SS-0.0-0.5 SL -280-SA6-SS-0.0-0.5 SL -281-SA6-SS-0.0-0.5 SL -300-SA6-SS-0.0-0.5)	DINOSEB	6	-	10.00-36.00	-	DINOSEB	J(all detects) R(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 Laboratory: LL

EDD Filename: DE199_v2. 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
P12012AQ240127A (SL-030-SA6-SS-0.0-0.5 SL -035-SA6-SS-0.0-0.5 SL -040-SA6-SS-0.0-0.5 SL -046-SA6-SS-0.0-0.5 SL -047-SA6-SS-0.0-0.5 SL -059-SA6-SS-0.0-0.5 SL -066-SA6-SS-0.0-0.5 SL -067-SA6-SS-0.0-0.5 SL -278-SA6-SS-0.0-0.5 SL -279-SA6-SS-0.0-0.5 SL -280-SA6-SS-0.0-0.5 SL -281-SA6-SS-0.0-0.5 SL -300-SA6-SS-0.0-0.5)	2,4,5-TP (Silvex)	64	-	68.00-114.00	-	2,4,5-TP (Silvex)	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
P19926AQ220107A (SL-030-SA6-SS-0.0-0.5 SL -035-SA6-SS-0.0-0.5 SL -040-SA6-SS-0.0-0.5 SL -046-SA6-SS-0.0-0.5 SL -047-SA6-SS-0.0-0.5 SL -059-SA6-SS-0.0-0.5 SL -066-SA6-SS-0.0-0.5 SL -067-SA6-SS-0.0-0.5 SL -072-SA6-SB-4.0-5.0 SL -072-SA6-SB-9.0-10.0 SL -083-SA6-SB-4.0-5.0 SL -083-SA6-SB-9.0-10.0 SL -116-SA6-SB-2.5-3.5 SL -118-SA6-SB-10.5-11.5 SL -118-SA6-SB-4.0-5.0 SL -278-SA6-SS-0.0-0.5 SL -279-SA6-SS-0.0-0.5 SL -280-SA6-SS-0.0-0.5 SL -281-SA6-SS-0.0-0.5 SL -300-SA6-SS-0.0-0.5)	ANTIMONY	54	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC Limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P19908BQ222252	ALUMINUM	129	-	80.00-120.00	-	ALUMINUM	
(SL-030-SA6-SS-0.0-0.5	TITANIUM	150	-	80.00-120.00	-	TITANIUM	
SL -035-SA6-SS-0.0-0.5							
SL -040-SA6-SS-0.0-0.5							
SL -046-SA6-SS-0.0-0.5							
SL -047-SA6-SS-0.0-0.5							
SL -059-SA6-SS-0.0-0.5							
SL -066-SA6-SS-0.0-0.5							
SL -067-SA6-SS-0.0-0.5							No Qual, SRM within QC Limits
SL -072-SA6-SB-4.0-5.0							
SL -072-SA6-SB-9.0-10.0							
SL -083-SA6-SB-4.0-5.0							
SL -083-SA6-SB-9.0-10.0							
SL -116-SA6-SB-2.5-3.5							
SL -118-SA6-SB-10.5-11.5							
SL -118-SA6-SB-4.0-5.0							
SL -278-SA6-SS-0.0-0.5							
SL -279-SA6-SS-0.0-0.5							
SL -280-SA6-SS-0.0-0.5							
SL -281-SA6-SS-0.0-0.5							
SL -300-SA6-SS-0.0-0.5)							

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LHLCSQ262049	2,4-DINITROPHENOL	16	-	37.00-120.00	-	2,4-DINITROPHENOL	
(SL-030-SA6-SS-0.0-0.5	4,6-DINITRO-2-METHYLPHENOL	30	-	53.00-110.00	-	4,6-DINITRO-2-METHYLPHEN	
SL -035-SA6-SS-0.0-0.5	BENZOIC ACID	38	-	62.00-154.00	-	BENZOIC ACID	
SL -040-SA6-SS-0.0-0.5							
SL -046-SA6-SS-0.0-0.5							
SL -047-SA6-SS-0.0-0.5							
SL -059-SA6-SS-0.0-0.5							
SL -066-SA6-SS-0.0-0.5							
SL -067-SA6-SS-0.0-0.5							
SL -072-SA6-SB-4.0-5.0							
SL -072-SA6-SB-9.0-10.0							J(all detects) UJ(all non-detects)
SL -083-SA6-SB-4.0-5.0							
SL -083-SA6-SB-9.0-10.0							
SL -116-SA6-SB-2.5-3.5							
SL -118-SA6-SB-10.5-11.5							
SL -118-SA6-SB-4.0-5.0							
SL -278-SA6-SS-0.0-0.5							
SL -279-SA6-SS-0.0-0.5							
SL -280-SA6-SS-0.0-0.5							
SL -281-SA6-SS-0.0-0.5							
SL -300-SA6-SS-0.0-0.5)							

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
LCSB16Q211423A **LCSB16Y211251A** (SL-072-SA6-SB-4.0-5.0 SL -083-SA6-SB-4.0-5.0 SL -116-SA6-SB-2.5-3.5 SL -118-SA6-SB-4.0-5.0 SL -278-SA6-SS-0.0-0.5)	METHYLENE CHLORIDE	129	127	76.00-124.00	-	METHYLENE CHLORIDE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-030-SA6-SS-0.0 -0.5	ACETONE	149	42.00-138.00	All Target Analytes	J(all detects)
SL-035-SA6-SS-0.0 -0.5	n-Triacontane-d62	46	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-281-SA6-SS-0.0 -0.5	n-Triacontane-d62	1	50.00-150.00	All Target Analytes	J(all detects) R(all non-detects)
SL-300-SA6-SS-0.0 -0.5	n-Triacontane-d62	26	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-035-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	1085	20.00-120.00	All Target Analytes	J(all detects)
SL-066-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	41	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-278-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	596	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-278-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	0	45.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SL-278-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	16	53.00-139.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-300-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	31 27	45.00-120.00 53.00-139.00	All Target Analytes	No Qual, Diluted Out

Method: 8260B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-083-SA6-SB-4.0 -5.0	DIBROMOFLUOROMETHANE	77	80.00-120.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-083-SA6-SB-4.0 -5.0	2,4,6-TRIBROMOPHENOL	22	35.00-130.00	No Affected Compounds	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-083-SA6-SB-9.0 -10.0	2,4,6-TRIBROMOPHENOL	144	35.00-130.00	All Target Analytes	J(all detects)
	2-FLUOROBIPHENYL	187	45.00-130.00		
	2-FLUOROPHENOL	186	25.00-130.00		
	Nitrobenzene-d5	181	40.00-130.00		
	PHENOL-D6	188	25.00-120.00		
	Terphenyl-d14	156	45.00-135.00		

Method: 8270C SIM
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB-SA6-SB-071311	Nitrobenzene-d5	134	40.00-130.00	No Affected Compounds	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-SA6-SB-071311	BORON	J	0.0074	0.0500	PQL	mg/L	J (all detects)
	CALCIUM	J	0.0740	0.200	PQL	mg/L	
	STRONTIUM	J	0.00047	0.0050	PQL	mg/L	

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-SA6-SB-071311	METHYLENE CHLORIDE	J	3	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-SA6-SB-071311	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.21	1.0	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.28	1.0	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA6-SS-0.0-0.5	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA6-SS-0.0-0.5	BORON	J	2.96	5.04	PQL	mg/Kg	J (all detects)
	TIN	J	2.40	10.1	PQL	mg/Kg	
	Zirconium	J	2.97	5.04	PQL	mg/Kg	
SL-035-SA6-SS-0.0-0.5	BORON	J	1.69	4.97	PQL	mg/Kg	J (all detects)
	SODIUM	J	63.5	99.4	PQL	mg/Kg	
	TIN	J	1.93	9.94	PQL	mg/Kg	
	Zirconium	J	2.28	4.97	PQL	mg/Kg	
SL-040-SA6-SS-0.0-0.5	BORON	J	1.77	5.12	PQL	mg/Kg	J (all detects)
	SODIUM	J	58.0	102	PQL	mg/Kg	
	TIN	J	2.44	10.2	PQL	mg/Kg	
	Zirconium	J	2.41	5.12	PQL	mg/Kg	
SL-046-SA6-SS-0.0-0.5	BORON	J	0.823	5.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	63.9	100	PQL	mg/Kg	
	TIN	J	1.80	10.0	PQL	mg/Kg	
	Zirconium	J	1.44	5.00	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-047-SA6-SS-0.0-0.5	BORON	J	1.00	5.06	PQL	mg/Kg	J (all detects)
	SODIUM	J	53.9	101	PQL	mg/Kg	
	TIN	J	2.30	10.1	PQL	mg/Kg	
	Zirconium	J	1.64	5.06	PQL	mg/Kg	
SL-059-SA6-SS-0.0-0.5	BORON	J	0.632	4.83	PQL	mg/Kg	J (all detects)
	TIN	J	2.06	9.66	PQL	mg/Kg	
	Zirconium	J	1.60	4.83	PQL	mg/Kg	
SL-066-SA6-SS-0.0-0.5	BORON	J	1.02	5.01	PQL	mg/Kg	J (all detects)
	SODIUM	J	59.0	100	PQL	mg/Kg	
	TIN	J	2.05	10.0	PQL	mg/Kg	
	Zirconium	J	1.84	5.01	PQL	mg/Kg	
SL-067-SA6-SS-0.0-0.5	BORON	J	1.31	5.05	PQL	mg/Kg	J (all detects)
	SODIUM	J	63.0	101	PQL	mg/Kg	
	TIN	J	2.24	10.1	PQL	mg/Kg	
	Zirconium	J	2.06	5.05	PQL	mg/Kg	
SL-072-SA6-SB-4.0-5.0	BORON	J	1.05	5.41	PQL	mg/Kg	J (all detects)
	TIN	J	2.47	10.8	PQL	mg/Kg	
	Zirconium	J	2.35	5.41	PQL	mg/Kg	
SL-072-SA6-SB-9.0-10.0	BORON	J	0.772	5.48	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	11.0	PQL	mg/Kg	
	Zirconium	J	2.94	5.48	PQL	mg/Kg	
SL-083-SA6-SB-4.0-5.0	TIN	J	2.20	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.01	5.34	PQL	mg/Kg	
SL-083-SA6-SB-9.0-10.0	TIN	J	2.52	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.83	5.47	PQL	mg/Kg	
SL-116-SA6-SB-2.5-3.5	BORON	J	0.422	5.17	PQL	mg/Kg	J (all detects)
	TIN	J	2.50	10.3	PQL	mg/Kg	
	Zirconium	J	2.59	5.17	PQL	mg/Kg	
SL-118-SA6-SB-10.5-11.5	TIN	J	1.86	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.21	5.24	PQL	mg/Kg	
SL-118-SA6-SB-4.0-5.0	BORON	J	4.00	5.42	PQL	mg/Kg	J (all detects)
	TIN	J	1.79	10.8	PQL	mg/Kg	
	Zirconium	J	3.68	5.42	PQL	mg/Kg	
SL-278-SA6-SS-0.0-0.5	BORON	J	1.63	4.93	PQL	mg/Kg	J (all detects)
	TIN	J	2.19	9.86	PQL	mg/Kg	
	Zirconium	J	1.48	4.93	PQL	mg/Kg	
SL-279-SA6-SS-0.0-0.5	BORON	J	2.43	5.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.5	100	PQL	mg/Kg	
	TIN	J	1.98	10.0	PQL	mg/Kg	
	Zirconium	J	1.56	5.00	PQL	mg/Kg	
SL-280-SA6-SS-0.0-0.5	BORON	J	2.91	5.16	PQL	mg/Kg	J (all detects)
	SODIUM	J	92.4	103	PQL	mg/Kg	
	TIN	J	2.18	10.3	PQL	mg/Kg	
	Zirconium	J	2.83	5.16	PQL	mg/Kg	
SL-281-SA6-SS-0.0-0.5	TIN	J	2.17	10.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.32	5.07	PQL	mg/Kg	
SL-300-SA6-SS-0.0-0.5	BORON	J	1.78	4.95	PQL	mg/Kg	J (all detects)
	TIN	J	1.96	9.89	PQL	mg/Kg	
	Zirconium	J	1.58	4.95	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA6-SS-0.0-0.5	ANTIMONY	J	0.164	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.163	0.411	PQL	mg/Kg	
	SILVER	J	0.0963	0.103	PQL	mg/Kg	
SL-035-SA6-SS-0.0-0.5	SELENIUM	J	0.0883	0.406	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0296	0.101	PQL	mg/Kg	
SL-040-SA6-SS-0.0-0.5	SELENIUM	J	0.0966	0.402	PQL	mg/Kg	J (all detects)
SL-046-SA6-SS-0.0-0.5	SELENIUM	J	0.169	0.404	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0309	0.101	PQL	mg/Kg	
SL-047-SA6-SS-0.0-0.5	SELENIUM	J	0.177	0.404	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0633	0.101	PQL	mg/Kg	
SL-059-SA6-SS-0.0-0.5	SELENIUM	J	0.0842	0.387	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0194	0.0966	PQL	mg/Kg	
SL-066-SA6-SS-0.0-0.5	CADMIUM	J	0.0810	0.101	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0776	0.405	PQL	mg/Kg	
	SILVER	J	0.0257	0.101	PQL	mg/Kg	
SL-067-SA6-SS-0.0-0.5	SELENIUM	J	0.112	0.396	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0291	0.0990	PQL	mg/Kg	
SL-072-SA6-SB-4.0-5.0	CADMIUM	J	0.0616	0.109	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0405	0.109	PQL	mg/Kg	
SL-072-SA6-SB-9.0-10.0	CADMIUM	J	0.0615	0.115	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0748	0.460	PQL	mg/Kg	
	SILVER	J	0.0611	0.115	PQL	mg/Kg	
SL-083-SA6-SB-4.0-5.0	ANTIMONY	J	0.0996	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0912	0.427	PQL	mg/Kg	
	SILVER	J	0.0360	0.107	PQL	mg/Kg	
SL-083-SA6-SB-9.0-10.0	ANTIMONY	J	0.0974	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0891	0.438	PQL	mg/Kg	
	SILVER	J	0.0416	0.109	PQL	mg/Kg	
SL-116-SA6-SB-2.5-3.5	CADMIUM	J	0.0625	0.104	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0378	0.104	PQL	mg/Kg	
SL-118-SA6-SB-10.5-11.5	SILVER	J	0.0180	0.102	PQL	mg/Kg	J (all detects)
SL-118-SA6-SB-4.0-5.0	SELENIUM	J	0.137	0.447	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0297	0.112	PQL	mg/Kg	
SL-278-SA6-SS-0.0-0.5	SELENIUM	J	0.219	0.398	PQL	mg/Kg	J (all detects)
SL-279-SA6-SS-0.0-0.5	ANTIMONY	J	0.0967	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0854	0.412	PQL	mg/Kg	
	SILVER	J	0.0684	0.103	PQL	mg/Kg	
SL-280-SA6-SS-0.0-0.5	ANTIMONY	J	0.117	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.109	0.413	PQL	mg/Kg	
	SILVER	J	0.0442	0.103	PQL	mg/Kg	
SL-281-SA6-SS-0.0-0.5	ANTIMONY	J	0.157	0.205	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.126	0.410	PQL	mg/Kg	
	SILVER	J	0.0481	0.102	PQL	mg/Kg	
SL-300-SA6-SS-0.0-0.5	SELENIUM	J	0.0670	0.412	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0620	0.103	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.67	1.0	PQL	mg/Kg	J (all detects)
SL-059-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.38	1.0	PQL	mg/Kg	J (all detects)
SL-066-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.0	PQL	mg/Kg	J (all detects)
SL-072-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-072-SA6-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.95	1.2	PQL	mg/Kg	J (all detects)
SL-083-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.34	1.0	PQL	mg/Kg	J (all detects)
SL-083-SA6-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.55	1.1	PQL	mg/Kg	J (all detects)
SL-116-SA6-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.24	1.1	PQL	mg/Kg	J (all detects)
SL-118-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.36	1.2	PQL	mg/Kg	J (all detects)
SL-279-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.64	1.0	PQL	mg/Kg	J (all detects)
SL-281-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.55	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA6-SS-0.0-0.5	MERCURY	J	0.0183	0.0990	PQL	mg/Kg	J (all detects)
SL-040-SA6-SS-0.0-0.5	MERCURY	J	0.0184	0.102	PQL	mg/Kg	J (all detects)
SL-047-SA6-SS-0.0-0.5	MERCURY	J	0.0232	0.0996	PQL	mg/Kg	J (all detects)
SL-066-SA6-SS-0.0-0.5	MERCURY	J	0.0454	0.0973	PQL	mg/Kg	J (all detects)
SL-067-SA6-SS-0.0-0.5	MERCURY	J	0.0258	0.0967	PQL	mg/Kg	J (all detects)
SL-116-SA6-SB-2.5-3.5	MERCURY	J	0.0107	0.103	PQL	mg/Kg	J (all detects)
SL-118-SA6-SB-10.5-11.5	MERCURY	J	0.0593	0.103	PQL	mg/Kg	J (all detects)
SL-118-SA6-SB-4.0-5.0	MERCURY	J	0.0186	0.105	PQL	mg/Kg	J (all detects)
SL-281-SA6-SS-0.0-0.5	MERCURY	J	0.0682	0.101	PQL	mg/Kg	J (all detects)
SL-300-SA6-SS-0.0-0.5	MERCURY	J	0.0599	0.0982	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA6-SS-0.0-0.5	EFH (C8-C11)	J	1.0	2.5	PQL	mg/Kg	J (all detects)
SL-035-SA6-SS-0.0-0.5	EFH (C15-C20)	J	4.1	6.1	PQL	mg/Kg	J (all detects)
SL-040-SA6-SS-0.0-0.5	EFH (C15-C20)	J	4.2	6.2	PQL	mg/Kg	J (all detects)
SL-046-SA6-SS-0.0-0.5	EFH (C15-C20) EFH (C8-C11)	J J	1.1 0.44	1.2 1.2	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-047-SA6-SS-0.0-0.5	EFH (C15-C20)	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-059-SA6-SS-0.0-0.5	EFH (C15-C20)	J	0.68	1.2	PQL	mg/Kg	J (all detects)
SL-066-SA6-SS-0.0-0.5	EFH (C15-C20)	J	0.95	1.2	PQL	mg/Kg	J (all detects)
SL-072-SA6-SB-4.0-5.0	EFH (C21-C30) EFH (C30-C40)	J J	1.2 0.67	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-118-SA6-SB-4.0-5.0	EFH (C15-C20)	J	0.58	1.3	PQL	mg/Kg	J (all detects)
SL-279-SA6-SS-0.0-0.5	EFH (C15-C20)	J	2.1	6.2	PQL	mg/Kg	J (all detects)
SL-281-SA6-SS-0.0-0.5	EFH (C15-C20)	J	4.2	6.1	PQL	mg/Kg	J (all detects)
SL-300-SA6-SS-0.0-0.5	EFH (C15-C20)	J	3.6	6.2	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.051	0.17	PQL	ug/Kg	J (all detects)
SL-035-SA6-SS-0.0-0.5	DELTA-BHC	J	0.099	0.17	PQL	ug/Kg	J (all detects)
SL-046-SA6-SS-0.0-0.5	Chlordane gamma-BHC (Lindane)	J J	2.3 0.076	3.4 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-047-SA6-SS-0.0-0.5	ALPHA-BHC	J	0.045	0.17	PQL	ug/Kg	J (all detects)
SL-059-SA6-SS-0.0-0.5	DELTA-BHC	J	0.071	0.17	PQL	ug/Kg	J (all detects)
SL-066-SA6-SS-0.0-0.5	4,4'-DDT DELTA-BHC ENDRIN ALDEHYDE HEPTACHLOR MIREX	J J J J J	0.32 0.054 0.090 0.073 0.31	0.34 0.17 0.34 0.17 0.34	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-067-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.054	0.17	PQL	ug/Kg	J (all detects)
SL-278-SA6-SS-0.0-0.5	ALDRIN	J	0.073	0.17	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-047-SA6-SS-0.0-0.5	Aroclor 5460	J	2.3	3.3	PQL	ug/Kg	J (all detects)
SL-280-SA6-SS-0.0-0.5	Aroclor 5460	J	1.1	3.4	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA6-SS-0.0-0.5	MCPP	J	140	260	PQL	ug/Kg	J (all detects)
SL-278-SA6-SS-0.0-0.5	MCPA MCPP	J J	110 110	260 260	PQL PQL	ug/Kg ug/Kg	J (all detects)

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

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-280-SA6-SS-0.0-0.5	2,4,5-T	J	0.16	0.18	PQL	ug/Kg	J (all detects)
SL-281-SA6-SS-0.0-0.5	MCPA	J	110	260	PQL	ug/Kg	J (all detects)
SL-300-SA6-SS-0.0-0.5	DICAMBA	J	0.66	1.2	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-072-SA6-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.7	4.1	PQL	ug/Kg	J (all detects)
SL-083-SA6-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.3	4.1	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.1	PQL	ug/Kg	
SL-116-SA6-SB-2.5-3.5	METHYLENE CHLORIDE	J	2.2	4.3	PQL	ug/Kg	J (all detects)
SL-118-SA6-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.4	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.10	3.9	PQL	ug/Kg	
SL-278-SA6-SS-0.0-0.5	ACETONE	J	7.7	8.4	PQL	ug/Kg	J (all detects)
	ISOPROPYLBENZENE	J	0.29	4.2	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	1.3	4.2	PQL	ug/Kg	
	TOLUENE	J	0.36	4.2	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA6-SS-0.0-0.5	Butylbenzylphthalate	J	98	170	PQL	ug/Kg	J (all detects)
SL-035-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	35	170	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	46	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	32	170	PQL	ug/Kg	
	CHRYSENE	J	79	170	PQL	ug/Kg	
	Di-n-butylphthalate	J	94	170	PQL	ug/Kg	
	FLUORANTHENE	J	25	170	PQL	ug/Kg	
SL-040-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	68	350	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	140	170	PQL	ug/Kg	
SL-046-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	340	PQL	ug/Kg	J (all detects)
SL-047-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	340	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	20	170	PQL	ug/Kg	
SL-059-SA6-SS-0.0-0.5	ACENAPHTHENE	J	29	170	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	52	170	PQL	ug/Kg	
	BENZO(A)PYRENE	J	150	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	79	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	90	170	PQL	ug/Kg	
	CARBAZOLE	J	36	170	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	26	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	79	170	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-083-SA6-SB-4.0-5.0	ANTHRACENE	J	22	180	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	150	180	PQL	ug/Kg	
	BENZO(A)PYRENE	J	160	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	100	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	89	180	PQL	ug/Kg	
	CHRYSENE	J	170	180	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	34	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	77	180	PQL	ug/Kg	
	NAPHTHALENE	J	24	180	PQL	ug/Kg	
	PHENANTHRENE	J	99	180	PQL	ug/Kg	
SL-083-SA6-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	31	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	44	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	48	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	36	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	26	180	PQL	ug/Kg	
	CHRYSENE	J	43	180	PQL	ug/Kg	
	FLUORANTHENE	J	47	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	33	180	PQL	ug/Kg	
	PYRENE	J	60	180	PQL	ug/Kg	
SL-281-SA6-SS-0.0-0.5	PHENANTHRENE	J	20	170	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA6-SS-0.0-0.5	ANTHRACENE	J	2.5	8.6	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	63	93	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	5.8	8.6	PQL	ug/Kg	
	Di-n-butylphthalate	J	47	93	PQL	ug/Kg	
	Di-n-octylphthalate	J	32	93	PQL	ug/Kg	
SL-035-SA6-SS-0.0-0.5	ANTHRACENE	J	2.6	8.5	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	48	91	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	7.8	8.5	PQL	ug/Kg	
	Di-n-octylphthalate	J	35	91	PQL	ug/Kg	
	PHENANTHRENE	J	5.8	8.5	PQL	ug/Kg	
SL-040-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.4	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.80	1.7	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.6	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.5	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.7	PQL	ug/Kg	
SL-046-SA6-SS-0.0-0.5	ANTHRACENE	J	0.54	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.5	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.97	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.9	18	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.9	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.72	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-047-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.3	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.5	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.90	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	6.4	18	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.9	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.89	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.7	PQL	ug/Kg	
SL-059-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	7.4	18	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	18	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.5	18	PQL	ug/Kg	
SL-066-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.7	18	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	8.4	18	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.2	18	PQL	ug/Kg	
SL-067-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	4.8	8.4	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	4.2	8.4	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	89	91	PQL	ug/Kg	
	Butylbenzylphthalate	J	62	91	PQL	ug/Kg	
	CHRYSENE	J	3.3	8.4	PQL	ug/Kg	
	Di-n-octylphthalate	J	34	91	PQL	ug/Kg	
	FLUORANTHENE	J	6.3	8.4	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	3.6	8.4	PQL	ug/Kg	
	PHENANTHRENE	J	3.4	8.4	PQL	ug/Kg	
	PYRENE	J	4.6	8.4	PQL	ug/Kg	
SL-072-SA6-SB-4.0-5.0	Di-n-octylphthalate	J	6.7	20	PQL	ug/Kg	J (all detects)
SL-072-SA6-SB-9.0-10.0	Di-n-octylphthalate	J	7.1	21	PQL	ug/Kg	J (all detects)
SL-083-SA6-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	80	96	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	51	96	PQL	ug/Kg	
	Di-n-butylphthalate	J	36	96	PQL	ug/Kg	
	Di-n-octylphthalate	J	51	96	PQL	ug/Kg	
SL-083-SA6-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	48	98	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	37	98	PQL	ug/Kg	
	PHENANTHRENE	J	5.9	9.1	PQL	ug/Kg	
SL-116-SA6-SB-2.5-3.5	Di-n-octylphthalate	J	6.6	19	PQL	ug/Kg	J (all detects)
SL-118-SA6-SB-10.5-11.5	Di-n-octylphthalate	J	8.3	19	PQL	ug/Kg	J (all detects)
SL-118-SA6-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.86	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.5	20	PQL	ug/Kg	
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.6	20	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	PYRENE	J	1.2	1.9	PQL	ug/Kg	
SL-278-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	36	43	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	33	43	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	180	460	PQL	ug/Kg	
	CHRYSENE	J	23	43	PQL	ug/Kg	
	Di-n-octylphthalate	J	170	460	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE199 **Laboratory: LL**

EDD Filename: DE199_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-279-SA6-SS-0.0-0.5	Butylbenzylphthalate	J	6.3	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.86	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.1	19	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	8.0	19	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.7	PQL	ug/Kg	
SL-280-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	5.4	8.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	94	PQL	ug/Kg	
	CHRYSENE	J	4.5	8.7	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	36	94	PQL	ug/Kg	
	FLUORANTHENE	J	4.2	8.7	PQL	ug/Kg	
SL-281-SA6-SS-0.0-0.5	ANTHRACENE	J	3.3	8.5	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	63	92	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	7.9	8.5	PQL	ug/Kg	
	Di-n-butylphthalate	J	36	92	PQL	ug/Kg	
SL-300-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	5.2	8.6	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.8	8.6	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	36	93	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	3.3	8.6	PQL	ug/Kg	
	Di-n-butylphthalate	J	35	93	PQL	ug/Kg	
	NAPHTHALENE	J	4.7	8.6	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA6-SS-0.0-0.5	FORMALDEHYDE	J	700	1500	PQL	ug/Kg	J (all detects)
SL-278-SA6-SS-0.0-0.5	FORMALDEHYDE	J	870	1500	PQL	ug/Kg	J (all detects)

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 26, 2011

Matrix: Soil/Water

Parameters: Volatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-278-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-083-SA6-SB-4.0-5.0
TB-071311
EB-SA6-SB-071311
EB-SA6-SS-071311

Introduction

This data review covers 5 soil samples and 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
7/14/11	Acetone 1,2-Dibromo-3-chloropropane	42 27	All soil samples in SDG DE199	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
7/15/11	Dichlorodifluoromethane Trichlorofluoromethane Acetone	32 26 34	All water samples in SDG DE199	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.

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
VBLKB16	7/14/11	Acetone Methylene chloride Chloroform Toluene	9.3 ug/Kg 2.1 ug/Kg 0.14 ug/Kg 0.11 ug/Kg	All soil samples in SDG DE199

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-278-SA6-SS-0.0-0.5	Acetone Methylene chloride Toluene	7.7 ug/Kg 1.3 ug/Kg 0.36 ug/Kg	8.4U ug/Kg 4.2U ug/Kg 4.2U ug/Kg
SL-072-SA6-SB-4.0-5.0	Acetone Methylene chloride	8.6 ug/Kg 1.7 ug/Kg	8.6U ug/Kg 4.1U ug/Kg
SL-116-SA6-SB-2.5-3.5	Acetone Methylene chloride	9.0 ug/Kg 2.2 ug/Kg	9.0U ug/Kg 4.3U ug/Kg
SL-118-SA6-SB-4.0-5.0	Acetone Methylene chloride Toluene	7.9 ug/Kg 1.4 ug/Kg 0.10 ug/Kg	7.9U ug/Kg 3.9U ug/Kg 3.9U ug/Kg
SL-083-SA6-SB-4.0-5.0	Acetone Methylene chloride Toluene	24 ug/Kg 1.3 ug/Kg 0.11 ug/Kg	24U ug/Kg 4.1U ug/Kg 4.1U ug/Kg

Sample TB-071311 was identified as a trip blank. No volatile contaminants were found.

Samples EB-SA6-SB-071311 and EB-SA6-SS-071311 were identified as equipment blanks. No volatile contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB-SA6-SB-071311	7/13/11	Methylene chloride	3.0 ug/L	SL-072-SA6-SB-4.0-5.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-083-SA6-SB-4.0-5.0

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-072-SA6-SB-4.0-5.0	Methylene chloride	1.7 ug/Kg	4.1U ug/Kg
SL-116-SA6-SB-2.5-3.5	Methylene chloride	2.2 ug/Kg	4.3U ug/Kg
SL-118-SA6-SB-4.0-5.0	Methylene chloride	1.4 ug/Kg	3.9U ug/Kg
SL-083-SA6-SB-4.0-5.0	Methylene chloride	1.3 ug/Kg	4.1U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-083-SA6-SB-4.0-5.0	Dibromofluoromethane	77 (80-120)	All TCL compounds	J (all detects) UJ (all non-detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) 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
LCS1B16 (All soil samples in SDG DE199)	Methylene chloride	129 (76-124)	127 (76-124)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-278-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-083-SA6-SB-4.0-5.0	Acetone 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE199	TB-071311 EB-SA6-SB-071311 EB-SA6-SS-071311	Dichlorodifluoromethane Trichlorofluoromethane Acetone	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE199	SL-083-SA6-SB-4.0-5.0	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R) (S)
DE199	SL-278-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-083-SA6-SB-4.0-5.0	Methylene chloride	J (all detects)	P	Laboratory control samples (%R) (L)
DE199	SL-278-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-083-SA6-SB-4.0-5.0 TB-071311 EB-SA6-SB-071311 EB-SA6-SS-071311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE199

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE199	SL-278-SA6-SS-0.0-0.5	Acetone Methylene chloride Toluene	8.4U ug/Kg 4.2U ug/Kg 4.2U ug/Kg	A	B
DE199	SL-072-SA6-SB-4.0-5.0	Acetone Methylene chloride	8.6U ug/Kg 4.1U ug/Kg	A	B
DE199	SL-116-SA6-SB-2.5-3.5	Acetone Methylene chloride	9.0U ug/Kg 4.3U ug/Kg	A	B
DE199	SL-118-SA6-SB-4.0-5.0	Acetone Methylene chloride Toluene	7.9U ug/Kg 3.9U ug/Kg 3.9U ug/Kg	A	B

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE199	SL-083-SA6-SB-4.0-5.0	Acetone Methylene chloride Toluene	24U ug/Kg 4.1U ug/Kg 4.1U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE199

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE199	SL-072-SA6-SB-4.0-5.0	Methylene chloride	4.1U ug/Kg	A	F
DE199	SL-116-SA6-SB-2.5-3.5	Methylene chloride	4.3U ug/Kg	A	F
DE199	SL-118-SA6-SB-4.0-5.0	Methylene chloride	3.9U ug/Kg	A	F
DE199	SL-083-SA6-SB-4.0-5.0	Methylene chloride	4.1U ug/Kg	A	F

LDC #: 26407R1a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/25/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: F
2nd Reviewer: A

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	SW	
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.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	NI	TB = 6 EB = 7, 8

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

Validated Samples: soil + water

1	SL-278-SA6-SS-0.0-0.5 S	11	VBLKB16	21		31	
2	SL-072-SA6-SB-4.0-5.0	12	VBLKY31	22		32	
3	SL-116-SA6-SB-2.5-3.5	13		23		33	
4	SL-118-SA6-SB-4.0-5.0	14		24		34	
5	SL-083-SA6-SB-4.0-5.0	15		25		35	
6	TB-071311 W	16		26		36	
7	EB-SA6-SB-071311 W	17		27		37	
8	EB-SA6-SS-071311 W	18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26407R/a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26407R/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

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
	7/14/11	CCV	F	42		All soils	J/UJ/A (c)
	10:59		MM	27		↓	↓
	7/15/11	CCV	JJ	32		All waters	(c)
	08:49		KK	26		↓	↓
			F	34			

LDC #: 26407R/a
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 7/14/11
Conc. units: ug/kg
Associated Samples: All SOILS

Compound	Blank ID		Sample Identification							
	VBLKB16		1	2	3	4	5			
F	9.3		7.7/8.4U	8.6/U	9.0/U	7.9/U	2U/U			
E	2.1		1.3/4.2U	1.7/4.1U	2.2/4.3U	1.4/3.9U	1.3/4.1U			
K	0.14		–	–	–	–	–			
CC	0.11		0.36/4.2U	–	–	0.10/3.9U	0.11/4.1U			
CRQL										

Blank analysis date: _____
Conc. units: _____
Associated Samples: _____

Compound	Blank ID	Sample Identification								
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:

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 #: 26407R1a
SDG #: DE199

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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

Field blank type: (circle one) Field Blank / ~~Rinsate~~ / Trip Blank / Other: _____ Associated Samples: 2-5

Compound	Blank ID	~~Blank ID~~	Sample Identification							
7/13/11 Sampling Date	7	x10	2	3	4	5				
Methylene chloride	3.0	30 ug/kg	1.7/4.1U	2.2/4.3U	1.4/3.9U	1.3/4.1U				
~~Acetone~~										
~~Chloroform~~										
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide 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 #: 26407R/a

VALIDATION FINDINGS WORKSHEET
Surrogate Spikes

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 Were all surrogate %R within QC limits?

Y (N) N/A If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R out of outside of criteria?

#	Date	Lab ID/Reference	Surrogate	%Recovery (Limits)	Associated Samples	Qualifications
		5	DFM	77 (80-120)	5	J/UJ/P (S)
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
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				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		
				( )		

	QC Limits (Soil)	QC Limits (Water)
SMC1 (TOL) = Toluene-d8	81-117	88-110
SMC2 (BFB) = Bromofluorobenzene	74-121	86-115
SMC3 (DCE) = 1,2-Dichloroethane-d4	80-120	80-120
SMC4 (DFM) = Dibromofluoromethane	80-120	86-118

LDC #: 26407R/9

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

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
		LCS1816	E	129 (76-124)	127 (76-124)	( )	All soils	J/Pdet (2)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26407R/a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (20 std)	Recalculated RRF (20 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	C (1st internal standard)	0.3396	0.3396	0.3517	0.3517	7	7
			CC (2nd internal standard)	0.8152	0.8152	0.8572	0.8572	5	5
			JJJ (3rd internal standard)	1.3349	1.3349	1.3695	1.3695	6	6
			(4th internal standard)						
2	ICAL.	5/12/11	C (1st internal standard)	0.4368	0.4368	0.4292	0.4292	10	10
			CC (2nd internal standard)	1.0260	1.0260	1.0444	1.0444	1	1
			JJJ (3rd internal standard)	1.6515	1.6515	1.6766	1.6766	3	3
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26467R1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)		Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 10:59	7/14/11	C	(1st internal standard)	0.3517	0.3342	0.3342	5	5
			CC	(2nd internal standard)	0.8572	0.9322	0.9322	9	9
			JJJ	(3rd internal standard)	1.3695	1.5207	1.5207	11	11
				(4th internal standard)					
2	CCV 08:49	7/15/11	C	(1st internal standard)	0.4292	0.3621	0.3621	16	16
			CC	(2nd internal standard)	1.0444	1.0117	1.0117	3	3
			JJJ	(3rd internal standard)	1.6766	1.7532	1.7532	5	5
				(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 #: 8640 17A2

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

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	56.448	113	113	0
1,2-Dichloroethane-d4	↓	54.101	108	108	↓
Toluene-d8		49.092	98	98	
Bromofluorobenzene		48.449	97	97	

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 #: 26907A74

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: lcs/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	20	23.69	22.61	118	118	113	113	5	5
Trichloroethene	↓	↓	20.73	20.35	104	104	102	102	2	2
Benzene			21.72	20.98	109	109	105	105	3	3
Toluene			21.85	21.23	109	109	106	106	3	3
Chlorobenzene			21.44	21.16	107	107	106	106	1	1

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 #: 26407R1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, CC

Conc. = $\frac{(4332)(50)(\quad)}{(735038)(0.8572)(4.87)(0.98)}$

=

0.4 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: July 13, 2011

LDC Report Date: October 25, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-278-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-083-SA6-SB-4.0-5.0
TB-071311
EB-SA6-SB-071311
EB-SA6-SS-071311

Introduction

This data review covers 5 soil samples and 3 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-071311 was identified as a trip blank. No 1,4-dioxane was found.

Samples EB-SA6-SB-071311 and EB-SA6-SS-071311 were identified as equipment blanks. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

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 RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-278-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-083-SA6-SB-4.0-5.0 TB-071311 EB-SA6-SB-071311 EB-SA6-SS-071311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R1b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/25/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
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	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 6 EB = 7, 8

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

Validated Samples:
SOIL + water

1	SL-278-SA6-SS-0.0-0.5 S	11	VBLKE22	21		31	
2	SL-072-SA6-SB-4.0-5.0	12	VBLKE21	22		32	
3	SL-116-SA6-SB-2.5-3.5	13		23		33	
4	SL-118-SA6-SB-4.0-5.0	14		24		34	
5	SL-083-SA6-SB-4.0-5.0	15		25		35	
6	TB-071311 W	16		26		36	
7	EB-SA6-SB-071311 W	17		27		37	
8	EB-SA6-SS-071311 W	18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26407R16

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	NA		✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	NA		✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26407R1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

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 (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/17/11	1,4-Dioxane (1st internal standard)	1.405	1.402	1.4910	1.4910	6	6
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)	(.10)	(.10)				
2	ICAL	6/16/11	↓ (1st internal standard)	1.3847	1.3847	1.3554	1.3554	J	J
			(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 #: 26407R1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	7/15/11	1,4-Dioxane (1st internal standard)	1.4910	1.4853	1.4853	0	0
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
2	ccv	7/14/11	↓ (1st internal standard)	1.3554	1.5126	1.5126	12	12
			(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 #: 26407A7D

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8	10	9.858	99	99	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 #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

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: LCSLP 3011

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										
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										
1,4- Dioxane	125	125	115.22	129.68	92	92	104	104	12	12

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 #: 26407R1b

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. _____, _____:

Conc. = $\frac{(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)}$

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 26, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-280-SA6-SS-0.0-0.5MS
SL-280-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 22 soil samples and one water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
7/29/11	Benzidine	30	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-280-SA6-SS-0.0-0.5MS SL-280-SA6-SS-0.0-0.5MSD SBLKH201	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.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKWL197	7/17/11	Benzoic acid	83 ug/L	All water samples in SDG DE199

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.

Sample EB-SA6-SB-071311 was identified as an equipment blank. No semivolatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-083-SA6-SB-9.0-10.0	Phenol-d6 2-Fluorophenol 2,4,6-Tribromophenol Nitrobenzene-d5 2-Fluorobiphenyl Terphenyl-d14	188 (25-120) 186 (25-130) 144 (35-130) 181 (40-130) 187 (45-130) 156 (45-135)	All TCL compounds	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
SL-280-SA6-SS-0.0-0.5MS/MSD (SL-280-SA6-SS-0.0-0.5)	Hexachloroethane 4,6-Dinitro-2-methylphenol Benzidine	55 (57-109) 10 (24-116) 34 (35-141)	- 12 (24-116) 32 (35-141)	- - -	J (all detects) UJ (all non-detects)	A
SL-280-SA6-SS-0.0-0.5MS/MSD (SL-280-SA6-SS-0.0-0.5)	2,4-Dinitrophenol	0 (20-143)	0 (20-143)	-	J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
197WLCS/D (All water samples in SDG DE199)	2,4,5-Trichlorophenol	-	109 (79-107)	-	J (all detects)	P
201LHLCS (All soil samples in SDG DE199)	Benzoic acid 2,4-Dinitrophenol 4,6-Dinitro-2-methylphenol	38 (62-113) 16 (37-120) 30 (53-110)	NA	NA	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 with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
SL-083-SA6-SB-9.0-10.0	Anthracene-d10 Phenanthrene-d10 Pyrene-d10 Perylene-d12	148716 (163084-652334) 203422 (266525-1066100) 194032 (302373-1209492) 130139 (205445-821780)	Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate 2,6-Dinitrotoluene 3-Nitroaniline 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenylphenyl ether 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenylphenyl ether Hexachlorobenzene Pentachlorophenol Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene Benzidine Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene Carbazole	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5	Benzidine	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE199	SL-083-SA6-SB-9.0-10.0	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE199	SL-280-SA6-SS-0.0-0.5	Hexachloroethane 4,6-Dinitro-2-methylphenol Benzidine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE199	SL-280-SA6-SS-0.0-0.5	2,4-Dinitrophenol	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE199	EB-SA6-SB-071311	2,4,5-Trichlorophenol	J (all detects)	P	Laboratory control samples (%R) (L)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Benzoic acid 2,4-Dinitrophenol 4,6-Dinitro-2-methylphenol	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-083-SA6-SB-9.0-10.0	Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate 2,6-Dinitrotoluene 3-Nitroaniline 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenylphenyl ether 4-Nitroaniline 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenylphenyl ether Hexachlorobenzene Pentachlorophenol Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene Benzidine Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene Carbazole	J (all detects) UJ (all non-detects)	A	Internal standards (area) (I)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R2a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/26/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A ~~SW~~	% RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	SW	ICV/CCV
V.	Blanks	SW	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D.
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	SW	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	EB = 20

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 + Waters

1	SL-280-SA6-SS-0.0-0.5	11	SL-278-SA6-SS-0.0-0.5	21	SL-046-SA6-SS-0.0-0.5	31	SBLKLH201
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22	#/MS	32	SBLKWL197
3	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-4.0-5.0	23	#/MSD	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-072-SA6-SB-9.0-10.0	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-116-SA6-SB-2.5-3.5	25		35	
6	SL-040-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-4.0-5.0	26		36	
7	SL-047-SA6-SS-0.0-0.5	17	SL-118-SA6-SB-10.5-11.5	27		37	
8	SL-059-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-4.0-5.0	28		38	
9	SL-066-SA6-SS-0.0-0.5	19	SL-083-SA6-SB-9.0-10.0	29		39	
10	SL-067-SA6-SS-0.0-0.5	20	EB-SA6-SB-071311 W	30		40	

LDC #: 26407R29

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 instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogates				
Were all surrogate %R within QC limits?		✓		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	✓			
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26407R2a

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?		✓		
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 from the associated calibration standard?	✓			
X. 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?	✓			
X. 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?	✓			
X. Reconstructed Ion Chromatography				
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.		✓		

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 #: 26407R2c

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 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
	7/29/11 18:29	CCV	SJS	30		SBLKLH201, 1, 2, 22, 23, 3 → 11	J/UJ/A (c)

CONCAL.2S

LDC #: 26407R29

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 7/12/11 **Blank analysis date:** 8/01/11
Conc. units: ug/L Associated Samples: All water (ND)

Compound	Blank ID	Sample Identification								
	SBLKW4197									
PPP	83									

Blank extraction date: _____ **Blank analysis date:** _____
Conc. units: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26407R29

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were percent recoveries (%R) for surrogates within QC limits?
Y N N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N N/A If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		18	TBP	22 (35-130)	no qual
				( )	
				( )	
				( )	
				( )	
				( )	
		19	PHL-d6	188 (25-120)	J/A def All TCL (5)
			2FP	186 (25-130)	
			TBP	144 (35-130)	
			NBZ	181 (40-130)	
			FBP	187 (45-130)	
			TPH	156 (45-135)	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP)= 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

LDC #: 26407R2s

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
		22 & 23	K	55 (57-109)	( )	( )	#1	J/UJ/A (Q)
		Tetralin		0 (70-130)	0 (70-130)	( )		J/R/A
			HH	0 (20-143)	0 (20-143)	( )		↓
			PP	10 (24-116)	12 (24-116)	( )		J/UJ/A
			SSS	34 (35-141)	32 (35-141)	( )		J/UJ/A
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )	

LDC #: 26407R09

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
		97WLLCS/D	Tetralin	0 (70-130)	0 (70-130)	( )	All water	J/R/P (L)
			Z	( )	109 (79-107)	( )	↓	J/Pdet ↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		201LHLCS	PPP	38 (62-113	( )	( )	All soils	J/UJ/P (L)
			HH	16 (37-120)	( )	( )	↓	↓
			PP	30 (53-110	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 2640 / RDG
SDG #: fc cover

VALIDATION FINDINGS WORKSHEET
Internal Standards

Page: 1 of 1
Reviewer: [illegible]
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 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
		19	ANT	148716 (163084-652334)		J/UJ/A (I)
			PHN	203422 (266528-1066100)		
			Pyrene-d10	194032 (302373-1209492)		↓
			PRY	130139 (205445-821780)		
					- - -	-
					all	list pp. page

* 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

Semi-Volatile Internal Standards

for #19

1,4-Dichlorobenzene-d4	Naphthalene-d8	Acenaphthene-d10
Phenol Bis(2-chloroethyl) ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 2-Methylphenol 2,2'-Oxybis(1-chloropropane) 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane	Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Bis-(2-chloroethoxy) methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 4-Chloro-3-methylphenol 2-Methylnaphthalene	Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate ~~Acenaphthylene~~ 2,6-Dinitrotoluene 3-Nitroaniline ~~Acenaphthene~~ 2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenylphenyl ether ~~Fluorene~~ 4-Nitroaniline
Phenanthrene-d10	**Pyrene-d10** ~~**Chrysene-d12**~~	**Perylene-d12**
4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene Pentachlorophenol ~~Phenanthrene~~ ~~Anthracene~~ Carbazole Di-n-butylphthalate Fluoranthene	Pyrene Butylbenzylphthalate 3,3-Dichlorobenzidine Benzo(a)anthracene Chrysene ~~Bis(2-ethylhexyl)phthalate~~ Benzidine	~~Di-n-octylphthalate~~ Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene ~~Dibenz(a,h)anthracene~~ Benzo(g,h,i)perylene

Semi-Volatile Surrogates

Acid	Base
Phenol-d5 2-Fluorophenol 2,4,6-Tribromophenol 2-Chlorophenol-d4	Nitrobenzene-d5 2-Fluorobiphenyl ~~Terphenyl-d14~~ 1,2-Dichlorobenzene-d4

LDC #: 24072Q9

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 (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/26/11	Phenol (1st internal standard)	2.679	2.679	2.583	2.583	4	4
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.445	0.445	0.445	0.445	2	2
			~~Fluorene~~ 2-Nitrotoluene (3rd internal standard)	0.447	0.447	0.418	0.418	12	12
			~~Pentachlorophenol~~ Hexachlorobenzene (4th internal standard)	0.157	0.157	0.164	0.164	6	6
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.781	0.781	0.758	0.78	5	5
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.869	1.869	1.769	1.769	13	13
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 #: 26407R29

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	7/29/11	Phenol (1st internal standard)	2.583	2.626	2.626	2	2
	18:29		~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.445	0.449	0.449	1	1
			~~Fluorene~~ 2-Nitroaniline (3rd internal standard)	0.418	0.450	0.450	8	8
			~~Pentachlorophenol~~ Hexachlorobenzene (4th internal standard)	0.164	0.155	0.155	5	5
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.758	0.815	0.815	7	7
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.769	1.965	1.965	11	11
2	CCV	8/01/11	~~Phenol (1st internal standard)~~		2.471	2.471	4	4
	8:23		Naphthalene (2nd internal standard)		0.449	0.449	1	1
			Fluorene (3rd internal standard)		0.441	0.441	5	5
			Pentachlorophenol (4th internal standard)		0.151	0.151	8	8
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.786	0.786	4	4
			~~Benzo(a)pyrene (6th internal standard)~~		2.015	2.015	14	14
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 #: 46401K04

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: H1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	85.421	85	85	0
2-Fluorobiphenyl	↓	93.053	93	93	
Terphenyl-d14	↓	82.149	82	82	
Phenol-d5	200	177.579	89	89	
2-Fluorophenol	↓	174.393	87	87	
2,4,6-Tribromophenol	↓	162.764	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 #: 26407I2-9

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the 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: 22+23

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	1666.67	ND	1383.04	1391.12	83	83	83	83	1	1
N-Nitroso-di-n-propylamine			ND	1446.49	1445.88	87	87	87	87	0	0
4-Chloro-3-methylphenol				1529.51	1571.2	92	92	94	94	3	3
Acenaphthene				1602.13	1559.94	96	96	94	94	3	3
Pentachlorophenol				1067.42	1130.65	64	64	68	68	6	6
Pyrene				1551.71	1554.14	93	93	93	93	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 #: 26407A2S

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 201 LHLCS

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	1492.37	NA	90	90				
N-Nitroso-di-n-propylamine			1453.99		87	87				
4-Chloro-3-methylphenol			1588.69		95	95				
Acenaphthene			1574.82		94	94				
Pentachlorophenol			1438.09		86	86				
Pyrene			1548.73		93	93	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 #: 26407R25

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, Phenanthrene

Conc. = $\frac{(12742)(20)(1000)(\quad)(\quad)}{(35443)(1.244)(30)(0.98)(\quad)}$

= 20 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: July 13, 2011

LDC Report Date: October 26, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-280-SA6-SS-0.0-0.5MS
SL-280-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 22 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

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 with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
7/11/11	Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene	26 27 26 26 26	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-046-SA6-SS-0.0-0.5 SBLKLL201	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 with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKWH197	7/17/11	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	0.22 ug/L 0.21 ug/L	All water samples in SDG DE199
SBLKLL201	7/21/11	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	7.9 ug/Kg 6.5 ug/Kg	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-118-SA6-SB-4.0-5.0 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
EB-SA6-SB-071311	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	0.28 ug/L 0.21 ug/L	1.0U ug/L 1.0U ug/L
SL-280-SA6-SS-0.0-0.5 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	36 ug/Kg 38 ug/Kg	94U ug/Kg 94U ug/Kg
SL-281-SA6-SS-0.0-0.5 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	36 ug/Kg 63 ug/Kg	92U ug/Kg 92U ug/Kg
SL-300-SA6-SS-0.0-0.5 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	35 ug/Kg 36 ug/Kg	93U ug/Kg 93U ug/Kg
SL-030-SA6-SS-0.0-0.5 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	47 ug/Kg 63 ug/Kg	93U ug/Kg 93U ug/Kg
SL-035-SA6-SS-0.0-0.5 (5X)	Bis(2-ethylhexyl)phthalate	48 ug/Kg	91U ug/Kg
SL-040-SA6-SS-0.0-0.5	Di-n-butylphthalate	8.8 ug/Kg	19U ug/Kg
SL-047-SA6-SS-0.0-0.5	Di-n-butylphthalate	8.9 ug/Kg	18U ug/Kg
SL-059-SA6-SS-0.0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	10 ug/Kg 24 ug/Kg	18U ug/Kg 18U ug/Kg
SL-066-SA6-SS-0.0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	8.4 ug/Kg 9.7 ug/Kg	18U ug/Kg 18U ug/Kg
SL-067-SA6-SS-0.0-0.5 (5X)	Bis(2-ethylhexyl)phthalate	89 ug/Kg	91U ug/Kg
SL-278-SA6-SS-0.0-0.5 (5X)	Bis(2-ethylhexyl)phthalate	180 ug/Kg	460U ug/Kg
SL-279-SA6-SS-0.0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	9.1 ug/Kg 19 ug/Kg	19U ug/Kg 19U ug/Kg
SL-118-SA6-SB-4.0-5.0	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	10 ug/Kg 8.5 ug/Kg	20U ug/Kg 20U ug/Kg
SL-083-SA6-SB-4.0-5.0 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	36 ug/Kg 80 ug/Kg	96U ug/Kg 96U ug/Kg
SL-083-SA6-SB-9.0-10.0 (5X)	Bis(2-ethylhexyl)phthalate	48 ug/Kg	98U ug/Kg
SL-046-SA6-SS-0.0-0.5	Di-n-butylphthalate	9.9 ug/Kg	18U ug/Kg

Sample EB-SA6-SB-071311 was identified as an equipment blank. No semivolatile contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB-SA6-SB-071311	7/13/11	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate Naphthalene	0.28 ug/L 0.21 ug/L 0.068 ug/L	All soil samples in SDG DE199

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
197WHLCS/LCSD (All water samples in SDG DE199)	Dimethylphthalate	-	-	45 (≤30)	J (all detects) UJ (all non-detects)	P
197WHLCS/LCSD (All water samples in SDG DE199)	Acenaphthylene Fluorene	- -	112 (70-110) 115 (75-114)	- -	J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-046-SA6-SS-0.0-0.5	Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE199	EB-SA6-SB-071311	Dimethylphthalate	J (all detects) UJ (all non-detects)	P	Laboratory control samples (RPD) (E)
DE199	EB-SA6-SB-071311	Acenaphthylene Fluorene	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE199

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE199	EB-SA6-SB-071311	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	1.0U ug/L 1.0U ug/L	A	B

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE199	SL-280-SA6-SS-0.0-0.5 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	94U ug/Kg 94U ug/Kg	A	B
DE199	SL-281-SA6-SS-0.0-0.5 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	92U ug/Kg 92U ug/Kg	A	B
DE199	SL-300-SA6-SS-0.0-0.5 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	93U ug/Kg 93U ug/Kg	A	B
DE199	SL-030-SA6-SS-0.0-0.5 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	93U ug/Kg 93U ug/Kg	A	B
DE199	SL-035-SA6-SS-0.0-0.5 (5X)	Bis(2-ethylhexyl)phthalate	91U ug/Kg	A	B
DE199	SL-040-SA6-SS-0.0-0.5	Di-n-butylphthalate	19U ug/Kg	A	B
DE199	SL-047-SA6-SS-0.0-0.5	Di-n-butylphthalate	18U ug/Kg	A	B
DE199	SL-059-SA6-SS-0.0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	18U ug/Kg 18U ug/Kg	A	B
DE199	SL-066-SA6-SS-0.0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	18U ug/Kg 18U ug/Kg	A	B
DE199	SL-067-SA6-SS-0.0-0.5 (5X)	Bis(2-ethylhexyl)phthalate	91U ug/Kg	A	B
DE199	SL-278-SA6-SS-0.0-0.5 (5X)	Bis(2-ethylhexyl)phthalate	460U ug/Kg	A	B
DE199	SL-279-SA6-SS-0.0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	19U ug/Kg 19U ug/Kg	A	B
DE199	SL-118-SA6-SB-4.0-5.0	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	20U ug/Kg 20U ug/Kg	A	B
DE199	SL-083-SA6-SB-4.0-5.0 (5X)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	96U ug/Kg 96U ug/Kg	A	B
DE199	SL-083-SA6-SB-9.0-10.0 (5X)	Bis(2-ethylhexyl)phthalate	98U ug/Kg	A	B
DE199	SL-046-SA6-SS-0.0-0.5	Di-n-butylphthalate	18U ug/Kg	A	B

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R2b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/25/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: A

METHOD: GC/MS Polynuclear Aromatic Hydrocarbons (EPA SW 846 Method 8270C-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30 r 2
IV.	Continuing calibration/ICV	SW	1 CV/CCV ±25
V.	Blanks	SW	
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.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	EB = 20

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-280-SA6-SS-0.0-0.5	11	SL-278-SA6-SS-0.0-0.5	21	SL-046-SA6-SS-0.0-0.5	31	SBLKLL201
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22	#1 MS	32	SBLKWH197
3	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-4.0-5.0	23	#1 MSD	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-072-SA6-SB-9.0-10.0	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-116-SA6-SB-2.5-3.5	25		35	
6	SL-040-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-4.0-5.0	26		36	
7	SL-047-SA6-SS-0.0-0.5	17	SL-118-SA6-SB-10.5-11.5	27		37	
8	SL-059-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-4.0-5.0	28		38	
9	SL-066-SA6-SS-0.0-0.5	19	SL-083-SA6-SB-9.0-10.0	29		39	
10	SL-067-SA6-SS-0.0-0.5	20	EB-SA6-SB-071311 W	30		40	

LDC #: 26407R26

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 tuning and performance				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogates				
Were all surrogate %R within QC limits?		✓		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?		✓		
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/ Matrix spike 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?	✓			
VIII. LCS				
Was an LCS analyzed for this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
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 from the associated calibration standard?	✓			
X Target compounds 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?	✓			
X 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?	✓			
X Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
X System performance				
System performance was found to be acceptable.	✓			
X Overall assessment of data				
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.		✓		

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 #: 26407R2b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 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
	7/11/11	1CV	HHH	26		SBLKLL201, 1→7*, 10→17, 21	J/UJ/A (C)
			III	27			
			JJJ	26			
			KKK	26			
			LLL	26			

CONCAL.2S

LDC #: 26407R2h

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 7/17/11 **Blank analysis date:** 7/18/11
Conc. units: ug/L Associated Samples: All water

Compound	Blank ID	Sample Identification								
	SBLKW#197			20						
XX	0.22			0.28/1.0U						
EEE	0.21			0.21/1.0U						

Blank extraction date: 7/21/11 **Blank analysis date:** 7/22/11
Conc. units: ug/Kg Associated Samples: ATTACHED 1-12, 16, 18, 19, 21

Compound	Blank ID	Sample Identification								
	SBLKLL	20	1(5X)	2(5X)	3(5X)	4(5X)	5(5X)	6	7	8
XX	7.9		36/94U	36/92U	35/93U	47/93U	NR	8.5/19U	8.9/18U	10/18U
~~EEE~~	6.5		38/94U	63/92U	36/93U	63/93U	48/91U	NR	NR	24/18/U
			9	10(5X)	11(5X)	12	16	18(5X)	19(5X)	21
↓	↓		8.4/18U	NR	NR	9.1/19U	10/20U	36/96U	NR	9.9/18U
			9.7/18U	89/91U	180/46U	19/U	8.5/20U	80/96U	48/98U	NR

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26407R2b

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug/L **Associated sample units:** ug/Kg
Sampling date: 7/13/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All soils (ND + 10X)

Compound	Blank ID	Sample Identification								
	20	5X/10X								
XX	0.28	2.8								
EEE	0.21	2.1								
S	0.068	0.34								
CRQL										

Blank units: _____ **Associated sample units:** _____
Sampling date: _____
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								
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 #: 26407R2b

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were percent recoveries (%R) for surrogates within QC limits?
Y N N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N N/A If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		20	NBZ	134 (40-134)	no qual
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	
				( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP)= 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

LDC #: 26407R2b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		197WHLCS/D	DD	( )	112 (70-110)	( )	All water	J/Pdet (L)
			CC	( )	( )	45 (30)	↓	J/UJ/P (E)
			NN	( )	115 (75-114)	( )	↓	J/Pdet (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26407R2b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (/ std)	Recalculated RRF (/ std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/11/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.045	1.045	1.074	1.074	4	4
			Fluorene (3rd internal standard)	1.232	1.232	1.235	1.235	8	8
			~~Pentachlorophenol (4th internal standard)~~ Anthracene	1.117	1.117	1.106	1.106	12	12
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.322	1.322	1.357	1.357	3	3
			~~Benzo(a)pyrene~~ (6th internal standard)	1.218	1.218	1.225	1.225	11	11
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 #: 26407R2b

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	7/18/11	~~Phenol (1st internal standard)~~					
	0543		Naphthalene (2nd internal standard)	1.074	1.053	1.053	2	2
			Fluorene (3rd internal standard)	1.235	1.327	1.327	7	7
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.106	1.206	1.206	9	9
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.357	1.302	1.302	4	4
			Benzo(a)pyrene (6th internal standard)	1.225	1.286	1.286	5	5
2	CCV	7/22/11	~~Phenol (1st internal standard)~~					
	0638		Naphthalene (2nd internal standard)		1.044	1.044	3	3
			Fluorene (3rd internal standard)		1.300	1.300	5	5
			~~Pentachlorophenol~~ Anthracene (4th internal standard)		1.176	1.176	6	6
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)		1.321	1.321	3	3
			Benzo(a)pyrene (6th internal standard)		1.268	1.268	4	4
3	CCV	7/22/11	~~Phenol (1st internal standard)~~					
	1714		Naphthalene (2nd internal standard)		1.021	1.021	5	5
			Fluorene (3rd internal standard)		1.218	1.218	1	1
			~~Pentachlorophenol~~ Anthracene (4th internal standard)		1.128	1.128	2	2
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)		1.277	1.277	6	6
			Benzo(a)pyrene (6th internal standard)		1.215	1.215	1	1

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407R2b
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FD
2nd Reviewer: A

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 0034	7/25/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.074	1.045	1.045	3	3
			Fluorene (3rd internal standard)	1.235	1.320	1.320	7	7
			Anthracene Pentachlorophenol (4th internal standard)	1.106	1.196	1.196	8	8
			Chrysene ~~Bis(2-ethylhexyl)phthalate~~ (5th internal standard)	1.357	1.350	1.350	1	1
			Benzo(a)pyrene (6th internal standard)	1.223	1.302	1.302	6	6
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 #:_____

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	0.2	0.217	108	108	0
2-Fluorobiphenyl	↓	0.183	91	91	↓
Terphenyl-d14	↓	0.167	84	84	↓
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 #: 26467R2D

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the 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: 22 + 23

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.33	33.33	ND	30.97	30.78	93	93	92	92	1	1
Pentachlorophenol											
Pyrene	↓	↓	ND	34.53	33.76	104	104	101	101	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 16401R01

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 801L

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	34.03	NA	102	102				
Pentachlorophenol										
Pyrene	33.33	↓	33.57	↓	101	101	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 #: 26407R2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_t	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, ~~Benzo~~ Benzo (g,h,i) perylene

Conc. = $\frac{(9794)(1.0)(1000)(5)(\quad)}{(27'3287)(1.146)(30)(0.96)(\quad)}$

=

5.43 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: July 13, 2011

LDC Report Date: October 25, 2011

Matrix: Soil/Water

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5

Introduction

This data review covers 10 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

Sample EB-SA6-SB-071311 was identified as an equipment blank. No N-nitrosodimethylamine was found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB-SA6-SB-071311	7/13/11	N-Nitrosodimethylamine	5 ng/L	All soil samples in SDG DE199

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

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 RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R2c **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: A

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
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	N	client specified
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	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-280-SA6-SS-0.0-0.5 S	11	SL-046-SA6-SS-0.0-0.5 S	21	SBLKLB201	31	
2	SL-281-SA6-SS-0.0-0.5	12		22	SBLKWH195	32	
3	SL-300-SA6-SS-0.0-0.5	13		23		33	
4	SL-030-SA6-SS-0.0-0.5	14		24		34	
5	SL-035-SA6-SS-0.0-0.5	15		25		35	
6	SL-047-SA6-SS-0.0-0.5	16		26		36	
7	SL-066-SA6-SS-0.0-0.5	17		27		37	
8	SL-067-SA6-SS-0.0-0.5	18		28		38	
9	SL-278-SA6-SS-0.0-0.5	19		29		39	
10	EB-SA6-SB-071311 W	20		30		40	

LDC #: 26407R2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓		✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.			✓	
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/ Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

LDC #: 26407R2C

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer: [illegible]

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: ng/L **Associated sample units:** ng/Kg
Sampling date: 7/13/11
Field blank type: (circle one) Field Blank / Rinsate / Other:_____ Associated Samples: All soils (ND)

Compound	Blank ID	Sample Identification								
	10									
N-Nitrosodimethylamine	5									
CRQL										

Blank units:_____ **Associated sample units:**_____
Sampling date:_____
Field blank type: (circle one) Field Blank / Rinsate / Other:_____ Associated Samples:_____

Compound	Blank ID	Sample Identification								
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 #: 26407R2C

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 (10 std)	Recalculated RRF (10 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/29/11	~~Phenol (1st internal standard)~~ NDMA	1.142	1.142	1.176	1.176	10	10
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407R2C

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 9:29	7/20/11	~~Phenol~~ (1st internal standard) NDMA	1.176	1.21906	1.21906	3.66	3.66
			~~Naphthalene (2nd internal standard)~~					
			Fluorene (3rd internal standard)					
	CCV 09:51	7/21/11	Pentachlorophenol (4th internal standard) ↓	1.176	1.22373	1.22373	4.0576	4.0576
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2	CCV 14:26	7/21/11	~~Phenol (1st internal standard)~~ ↓	1.176	1.21696	1.21696	3.48142	3.48142
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
	CCV 18:00	7/21/11	Pentachlorophenol (4th internal standard) ↓	1.176	1.22237	~~3.944~~ 1.22237	3.941	3.941
			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 #: [illegible]

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

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	25.15	17.105	68	68	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 #: 26407R2C

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: 20/LBLCS

Compound	Spike Added (ng/kg)		Spike Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	833.33	NA	815.44	NA	98	98	NA			
~~N-Nitroso-di-n-propylamine~~										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
~~Pyrene~~										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407R2C

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 = $\frac{(A_x)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_t)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #10 , NDMA

Conc. = $\frac{(2268)(75)(1000)(\quad)(\quad)}{(9933)(1.176)(94)(\quad)(\quad)}$

= 5 ng/L

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 25, 2011

Matrix: Soil

Parameters: Chlorinated Pesticides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-046-SA6-SS-0.0-0.5
SL-280-SA6-SS-0.0-0.5MS
SL-280-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 15 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
8/16/11	IP10228-ICV	RTX-CLPI	Endrin aldehyde	21.0	SL-030-SA6-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
8/16/11	IP10228-ICV	RTX-CLPII	Endrin aldehyde	24.1	SL-030-SA6-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A

Retention times (RT) of all compounds in the calibration standards were within QC limits.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-035-SA6-SS-0.0-0.5	Not specified	Decachlorobiphenyl	1085 (20-180)	All TCL compounds except 4,4'-DDT Chlordane (Technical)	J (all detects)	A
SL-066-SA6-SS-0.0-0.5	Not specified	Tetrachloro-m-xylene	41 (50-130)	All TCL compounds	J (all detects) UJ (all non-detects)	P
SL-278-SA6-SS-0.0-0.5	Not specified	Decachlorobiphenyl	596 (20-120)	All TCL compounds except 4,4'-DDT alpha-BHC	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 not within the QC limits. Since the samples were diluted out, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-030-SA6-SS-0.0-0.5	gamma-BHC	44.99	J (all detects)	A
SL-066-SA6-SS-0.0-0.5	delta-BHC Mirex	68.70 46.92	J (all detects) J (all detects)	A
SL-067-SA6-SS-0.0-0.5	gamma-BHC delta-BHC	57.13 62.19	J (all detects) J (all detects)	A
SL-278-SA6-SS-0.0-0.5	Aldrin	45.88	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-030-SA6-SS-0.0-0.5	Endrin aldehyde	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE199	SL-035-SA6-SS-0.0-0.5	All TCL compounds except 4,4'-DDT Chlordane (Technical)	J (all detects)	A	Surrogate spikes (%R) (S)
DE199	SL-066-SA6-SS-0.0-0.5	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R) (S)
DE199	SL-278-SA6-SS-0.0-0.5	All TCL compounds except 4,4'-DDT alpha-BHC	J (all detects)	A	Surrogate spikes (%R) (S)
DE199	SL-030-SA6-SS-0.0-0.5	gamma-BHC	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE199	SL-066-SA6-SS-0.0-0.5	delta-BHC Mirex	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE199	SL-067-SA6-SS-0.0-0.5	gamma-BHC delta-BHC	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE199	SL-278-SA6-SS-0.0-0.5	Aldrin	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R3a
SDG #: DE199
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level IV

Date: 10/25/11
Page: 1 of 1
Reviewer: EJ
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: 7/13/11
II.	GC/ECD Instrument Performance Check	A	
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	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	N	

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

Validated Samples:
SOIL

1	SL-280-SA6-SS-0.0-0.5	11	SL-278-SA6-SS-0.0-0.5	21	PBLK08201	31	
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22		32	
3	SL-300-SA6-SS-0.0-0.5	13	SL-046-SA6-SS-0.0-0.5	23		33	
4	SL-030-SA6-SS-0.0-0.5	14	#1 MS	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	#1 MSD	25		35	
6	SL-040-SA6-SS-0.0-0.5	16		26		36	
7	SL-047-SA6-SS-0.0-0.5	17		27		37	
8	SL-059-SA6-SS-0.0-0.5	18		28		38	
9	SL-066-SA6-SS-0.0-0.5	19		29		39	
10	SL-067-SA6-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 26401K3a
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: PZ
2nd Reviewer: [illegible]

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ___%D or ___%R	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15%.0 for individual breakdown in the Evaluation mix standards?	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ~~≤ 15%.0~~ 20 or percent recoveries ~~85-115%~~ 80-120?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?			✓	
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	✓			
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	

LDC #: 26407R3a
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 #: 26407R3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: T

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 ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	8/16/11	IP10228-ICV	RTX-CLP I	R	2.0	( )	4	J/UA (c)
			RTX-CLP II	R	24.1	( )	↓	↓
						( )		
						( )		
						( )		
						( )		
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						( )		
						( )		

LDC #: 26407R39

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?

(S)

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	2, 6	surrogate	outside limit	( )	no qual >5X PL
				( )	
				( )	
	5	~~8~~ NS	~~1085~~ θ	1085 (20-180)	J/A det all except θ + Chlordane (Technical)
				( )	
				( )	
	9	NS	Y	41 (50-130)	J/UJ/P all
				( )	
				( )	
	11	NS	θ	596 (20-120)	J/A det all except θ + A
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	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 #: 26407R3a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of ___
Reviewer: FT
2nd Reviewer: ___

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	14 + 15	several	compounds	are outside	( )	1	no qual SXPL
			QC limits	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407R3q

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 col Finding ≤40	Associated Samples	Qualifications
	D	44.99	4	J/A det * XIII
	C	68.70	9	↓ * XIII
	Mirex	46.92		
	D	57.13	10	↓ * XIII
	C	62.19		
	F	45.88	11	↓ * XIII

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26407R39
SDG #: see cover

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 followin calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 10/100 CF (std)	Recalculated 10/100 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	IP10224	8/12/11	endosulfan / RTX-CLP	9.38×10^2	9.38×10^2	9.98×10^2	9.98×10^2	13.5	13.5
			methoxychlor ↓	3.85×10^2	3.85×10^2	3.75×10^2	3.75×10^2	5.8	5.8
			↓ RTX CLP II	2.87×10^3	2.87×10^3	2.89×10^3	2.89×10^3	2.5	2.5
2			↓	7.17×10^2	7.17×10^2	6.95×10^2	6.95×10^2	5.5	5.5
	IP10228	8/16/11	↓	1.07×10^3	1.07×10^3	1.08×10^3	1.08×10^3	4.3	4.3
			↓	2.71×10^2	2.71×10^2	2.69×10^2	2.69×10^2	6.1	6.1
3			↓	2.94×10^3	2.94×10^3	3.21×10^3	3.21×10^3	10.4	10.4
			↓	7.17×10^2	7.17×10^2	7.27×10^2	7.27×10^2	7.0	7.0
	IP10234	8/22/11	↓	2.0×10^3	2.0×10^3	2.09×10^3	2.09×10^3	5.1	5.1
4			↓	8.16×10^2	8.16×10^2	8.35×10^2	8.35×10^2	6.4	6.4
			↓	2.34×10^3	2.34×10^3	2.46×10^3	2.46×10^3	8.5	8.5
			↓	7.20×10^2	7.20×10^2	7.66×10^2	7.66×10^2	14.7	14.7

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 recalculat results.

LDC #: 26407R35
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	ccv. 5R	8/12/11	endosulfan I RTX-CLP1	10.00	8.76	8.76	12.4	12.4
	1919		methoxychlor	100.0	95.23	95.23	4.8	4.8
			RTX-CLP2	10.0	9.15	9.15	8.5	8.5
2			↓	100.0	92.40	92.40	7.6	7.6
3			Samples on 8/17/11	were	analyzed	after	1 CAL	
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 th recalculated results.

SDG #: pw cover

Surrogate Results Verification

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

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene	RTXCLPII	1.04	1.113175	107	107	0
Decachlorobiphenyl	RTXCLP1	1.04	0.61064	59	59	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 #: 26407R3g
SDG #: all covered

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

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 us the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = I MS - MSD I * 2/(MS + MSD)

MS = Matrix spike percent recovery

MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 14 & 15

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	Recalculate
gamma-BHC	0.34	0.34	ND	0.27	0.51	79	79	150	150	62	62
4,4'-DDT	0.71	0.71	18.98	9.25	9.8	-1369	-1369	-1092	-1092	6	6

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.(of the recalculated results.

LDC #: 26407R3S
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: 1
2nd Reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for th 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: LCS 0820 /

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	0.34	NA	0.27	NA	79	79				
4,4'-DDT	0.71	↓	0.67	↓	94	94	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 #: 26407R3s
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

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-DDT

Conc. = $\frac{(27175)(10)(X)}{(1.91 \times 10^3)(60)(0.959)}$

=

20 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: July 13, 2011

LDC Report Date: October 25, 2011

Matrix: Soil/Water

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5MS
SL-281-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 22 soil samples one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
7/23/11	CCV (03:58)	ZBMultiR2	Aroclor-1260	22.5	SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260	J (all detects) UJ (all non-detects)	A
7/23/11	CCV (04:16)	ZBMultiR1	Aroclor-5460	26.6	SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Aroclor-5460	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
7/23/11	CCV (04:16)	ZBMultiR2	Aroclor-5460	32.0	SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Aroclor-5460	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Sample EB-SA6-SB-071311 was identified as an equipment blank. No polychlorinated biphenyl contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-278-SA6-SS-0.0-0.5	Not specified	Tetrachloro-m-xylene Decachlorobiphenyl	16 (53-139) 0 (45-120)	All TCL compounds	J (all detects) R (all non-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 not within the QC limits. Since the samples were diluted out, no data were qualified.

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. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-035-SA6-SS-0.0-0.5	Aroclor-1254	49.19	J (all detects)	A
SL-047-SA6-SS-0.0-0.5	Aroclor-1254	56.22	J (all detects)	A
SL-067-SA6-SS-0.0-0.5	Aroclor-5460 Aroclor-1254	154.22 56.93	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 DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1260 Aroclor-5460	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE199	SL-278-SA6-SS-0.0-0.5	All TCL compounds	J (all detects) R (all non-detects)	A	Surrogate spikes (%R) (S)
DE199	SL-035-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5	Aroclor-1254	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE199	SL-067-SA6-SS-0.0-0.5	Aroclor-5460 Aroclor-1254	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R3b
SDG #: DE199
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level IV

Date: 10/25/11
Page: 1 of 1
Reviewer: F
2nd Reviewer: C

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD ≤ 20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	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/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	ND	EB = 20

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-280-SA6-SS-0.0-0.5	11	SL-278-SA6-SS-0.0-0.5	21	SL-046-SA6-SS-0.0-0.5	31	PBLK122202
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22	# 2 MS	32	PBLK18200
3	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-4.0-5.0	23	# 2 MSD	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-072-SA6-SB-9.0-10.0	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-116-SA6-SB-2.5-3.5	25		35	
6	SL-040-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-4.0-5.0	26		36	
7	SL-047-SA6-SS-0.0-0.5	17	SL-118-SA6-SB-10.5-11.5	27		37	
8	SL-059-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-4.0-5.0	28		38	
9	SL-066-SA6-SS-0.0-0.5	19	SL-083-SA6-SB-9.0-10.0	29		39	
10	SL-067-SA6-SS-0.0-0.5	20	EB-SA6-SB-071311 W	30		40	

Notes:

LDC #: 26407R3b
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FJ
2nd Reviewer: A

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓ ~~✓~~			
Was a curve fit used for evaluation?	~~✓~~	✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	~~✓~~		✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26407B36
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.		✓		

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 #: 26407R3b

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 ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	7/23/11 3:58	CCV	ZBmultiR2	BB	22.5	( )	12 → 19, 21	J/UJ/A (C) (gel Y, Z, AA, BB)
						( )		
						( )		
	7/23/11 4:16	CCV	ZBmultiR1	Aroclor 5460	26.6	( )	↓	J/UJ/A (C) ↓
			ZBmultiR2	↓	32.0	( )		
						( )		
						( )		
						( )		
						( )		
						( )		
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						( )		

LDC #: 26407R3h

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
	3	NS	Y	27 (53-139)	no qual 10X DL
			θ	31 (45-120)	
				( )	
	11	↓	↓	16 (↓)	J/R/Δ (s)
				0 (↓)	↓
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	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 #: 26407R36

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: / GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	22+23	V	372 (29-146)	273 (29-146)	31 (50)	2	no qual 10X PQL
		BB	563 (39-149)	998 (39-149)	56 (↓)	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407R35

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ~~GC~~ 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
	AA	49.19	5	J/A det * XIII
	AA	56.22	7	↓
	Aroclor 5460	154.22	10	
	AA	56.93	↓	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26407R3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (20 ul std)	Recalculated CF (20 ul std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	IP20174	6/23/11	Aroclor 1260-1 ZB R1	4X	4X	4X	4X	4.3	4.3
			ZB R2	24X	24X	24	24	2.6	2.6
2	IP20214	6/2/11	↓	51	51	55	55	55	6.8
				264	264	280	280	280	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.

LDC #: 26407R3b
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	78R	7/20/11	1260 ZBR1	200.0	201.98	201.98	1.0	1.0
	21:56		R2	200.0	199.77	199.77	0.1	0.1
2	28R	7/22/11	1260 ZBR1	200	188.70	188.70	5.6	5.6
	20:51		R2	200	187.85	187.85	6.1	6.1
3	51R	7/23/11	1260 ZBR1	200	163.50	163.50	18.2	18.2
	3:58		R2	200	155.07	155.07	22.50	22.50
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TCMX	ZB-R1	1.0379	0.986504	95	95	0
PCB	↓	↓	0.757376	73	73	↓

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: [illegible]
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: 22 + 23

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	ND	93.92	166.3	563	563	998	998	56	56

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 #: 26401PSD
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: FZ
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/D 12202

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	~~16.67~~ NA	16.66	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 #: 26407R25
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #2 Compound Name 5460

Concentration = 68.59 / 0.976

= 70 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	5460-1 = 876.776184 (2) (10) / 4.75)(60)(0.976)			1254-1 =	61.53
				2 =	62.281
				3 =	66.105
	=	68.45 61.53		4 =	89.864
				5 =	67.606
				6 =	64.171
				Ave	68.59

Comments: [illegible]

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil/Water

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-280-SA6-SS-0.0-0.5MS
SL-280-SA6-SS-0.0-0.5MSD
SL-280-SA6-SS-0.0-0.5DUP
SL-059-SA6-SS-0.0-0.5MS
SL-059-SA6-SS-0.0-0.5MSD
SL-059-SA6-SS-0.0-0.5DUP
SL-072-SA6-SB-4.0-5.0MS
SL-072-SA6-SB-4.0-5.0MSD
SL-072-SA6-SB-4.0-5.0DUP

Introduction

This data review covers 29 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, 7470A, and 7471A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Boron Strontium	4.280 ug/L 0.290 ug/L	All water samples in SDG DE199
ICB/CCB	Beryllium Cobalt Mercury Vanadium	0.059 ug/L 0.12 ug/L 0.089 ug/L 0.13 ug/L	All water samples in SDG DE199
PB (prep blank)	Calcium Iron Lead Magnesium Manganese Phosphorus Strontium Tin Titanium Zirconium	6.189 mg/Kg 4.548 mg/Kg 0.020 mg/Kg 0.739 mg/Kg 0.047 mg/Kg 1.561 mg/Kg 0.033 mg/Kg 1.548 mg/Kg 0.076 mg/Kg 0.517 mg/Kg	All soil samples in SDG DE199

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Titanium	0.39 ug/L	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5
ICB/CCB	Titanium	0.19 ug/L	SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5
ICB\CCB	Arsenic	0.57 ug/L	SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-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
EB-SA6-SB-071311	Boron Strontium	7.4 ug/L 0.47 ug/L	7.4U ug/L 0.47U ug/L
SL-280-SA6-SS-0.0-0.5	Tin	2.2 mg/Kg	2.2U mg/Kg
SL-281-SA6-SS-0.0-0.5	Tin Zirconium	2.2 mg/Kg 1.3 mg/Kg	2.2U mg/Kg 1.3U mg/Kg
SL-300-SA6-SS-0.0-0.5	Tin Zirconium	2.0 mg/Kg 1.6 mg/Kg	2.0U mg/Kg 1.6U mg/Kg
SL-030-SA6-SS-0.0-0.5	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-035-SA6-SS-0.0-0.5	Tin Zirconium	1.9 mg/Kg 2.3 mg/Kg	1.9U mg/Kg 2.3U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-040-SA6-SS-0.0-0.5	Tin Zirconium	2.4 mg/Kg 2.4 mg/Kg	2.4U mg/Kg 2.4U mg/Kg
SL-047-SA6-SS-0.0-0.5	Tin Zirconium	2.3 mg/Kg 1.6 mg/Kg	2.3U mg/Kg 1.6U mg/Kg
SL-059-SA6-SS-0.0-0.5	Tin Zirconium	2.1 mg/Kg 1.6 mg/Kg	2.1U mg/Kg 1.6U mg/Kg
SL-066-SA6-SS-0.0-0.5	Tin Zirconium	2.0 mg/Kg 1.8 mg/Kg	2.0U mg/Kg 1.8U mg/Kg
SL-067-SA6-SS-0.0-0.5	Tin Zirconium	2.2 mg/Kg 2.1 mg/Kg	2.2U mg/Kg 2.1U mg/Kg
SL-278-SA6-SS-0.0-0.5	Tin Zirconium	2.2 mg/Kg 1.5 mg/Kg	2.2U mg/Kg 1.5U mg/Kg
SL-279-SA6-SS-0.0-0.5	Tin Zirconium	2.0 mg/Kg 1.6 mg/Kg	2.0U mg/Kg 1.6U mg/Kg
SL-072-SA6-SB-4.0-5.0	Tin Zirconium	2.5 mg/Kg 2.3 mg/Kg	2.5U mg/Kg 2.3U mg/Kg
SL-072-SA6-SB-9.0-10.0	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-116-SA6-SB-2.5-3.5	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-118-SA6-SB-4.0-5.0	Tin	1.8 mg/Kg	1.8U mg/Kg
SL-118-SA6-SB-10.5-11.5	Tin Zirconium	1.9 mg/Kg 1.2 mg/Kg	1.9U mg/Kg 1.2U mg/Kg
SL-083-SA6-SB-4.0-5.0	Tin	2.2 mg/Kg	2.2U mg/Kg
SL-083-SA6-SB-9.0-10.0	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-046-SA6-SS-0.0-0.5	Tin Zirconium	1.8 mg/Kg 1.4 mg/Kg	1.8U mg/Kg 1.4U mg/Kg

Sample EB-SA6-SB-071311 was identified as an equipment blank. No metal contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB-SA6-SB-071311	7/13/11	Boron Calcium Strontium	7.4 ug/L 74.0 ug/L 0.47 ug/L	All soil samples in SDG DE199

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-280-SA6-SS-0.0-0.5	Boron	2.9 mg/Kg	2.9U mg/Kg
SL-300-SA6-SS-0.0-0.5	Boron	1.8 mg/Kg	1.8U mg/Kg
SL-030-SA6-SS-0.0-0.5	Boron	3.0 mg/Kg	3.0U mg/Kg
SL-035-SA6-SS-0.0-0.5	Boron	1.7 mg/Kg	1.7U mg/Kg
SL-040-SA6-SS-0.0-0.5	Boron	1.8 mg/Kg	1.8U mg/Kg
SL-047-SA6-SS-0.0-0.5	Boron	1.0 mg/Kg	1.0U mg/Kg
SL-059-SA6-SS-0.0-0.5	Boron	0.63 mg/Kg	0.63U mg/Kg
SL-066-SA6-SS-0.0-0.5	Boron	1.0 mg/Kg	1.0U mg/Kg
SL-067-SA6-SS-0.0-0.5	Boron	1.3 mg/Kg	1.3U mg/Kg
SL-278-SA6-SS-0.0-0.5	Boron	1.6 mg/Kg	1.6U mg/Kg
SL-279-SA6-SS-0.0-0.5	Boron	2.4 mg/Kg	2.4U mg/Kg
SL-072-SA6-SB-4.0-5.0	Boron	1.0 mg/Kg	1.0U mg/Kg
SL-072-SA6-SB-9.0-10.0	Boron	0.77 mg/Kg	0.77U mg/Kg
SL-116-SA6-SB-2.5-3.5	Boron	0.42 mg/Kg	0.42U mg/Kg
SL-046-SA6-SS-0.0-0.5	Boron	0.82 mg/Kg	0.82U mg/Kg

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-280-SA6-SS-0.0-0.5MS/MSD (All soil samples in SDG DE199)	Antimony Copper Vanadium	22 (75-125) - 74 (75-125)	14 (75-125) 65 (75-125) -	28 (≤20) - -	J (all detects) UJ (all non-detects)	A
SL-280-SA6-SS-0.0-0.5MS/MSD (All soil samples in SDG DE199)	Arsenic	127 (75-125)	-	-	J (all detects)	A
SL-059-SA6-SS-0.0-0.5MS/MSD (All soil samples in SDG DE199)	Phosphorus	233 (75-125)	-	28 (≤20)	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-280-SA6-SS-0.0-0.5DUP (All soil samples in SDG DE199)	Arsenic Cobalt	33 (≤20) 34 (≤20)	- -	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
SL-059-SA6-SS-0.0-0.5DUP (All soil samples in SDG DE199)	Calcium	43 (≤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) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Antimony Phosphorus	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q,E)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Copper Vanadium	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Arsenic	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 SL-046-SA6-SS-0.0-0.5	Arsenic Cobalt Calcium	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-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
Metals - Laboratory Blank Data Qualification Summary - SDG DE199

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE199	EB-SA6-SB-071311	Boron Strontium	7.4U ug/L 0.47U ug/L	A	B
DE199	SL-280-SA6-SS-0.0-0.5	Tin	2.2U mg/Kg	A	B
DE199	SL-281-SA6-SS-0.0-0.5	Tin Zirconium	2.2U mg/Kg 1.3U mg/Kg	A	B
DE199	SL-300-SA6-SS-0.0-0.5	Tin Zirconium	2.0U mg/Kg 1.6U mg/Kg	A	B
DE199	SL-030-SA6-SS-0.0-0.5	Tin	2.4U mg/Kg	A	B
DE199	SL-035-SA6-SS-0.0-0.5	Tin Zirconium	1.9U mg/Kg 2.3U mg/Kg	A	B
DE199	SL-040-SA6-SS-0.0-0.5	Tin Zirconium	2.4U mg/Kg 2.4U mg/Kg	A	B
DE199	SL-047-SA6-SS-0.0-0.5	Tin Zirconium	2.3U mg/Kg 1.6U mg/Kg	A	B
DE199	SL-059-SA6-SS-0.0-0.5	Tin Zirconium	2.1U mg/Kg 1.6U mg/Kg	A	B
DE199	SL-066-SA6-SS-0.0-0.5	Tin Zirconium	2.0U mg/Kg 1.8U mg/Kg	A	B
DE199	SL-067-SA6-SS-0.0-0.5	Tin Zirconium	2.2U mg/Kg 2.1U mg/Kg	A	B
DE199	SL-278-SA6-SS-0.0-0.5	Tin Zirconium	2.2U mg/Kg 1.5U mg/Kg	A	B
DE199	SL-279-SA6-SS-0.0-0.5	Tin Zirconium	2.0U mg/Kg 1.6U mg/Kg	A	B
DE199	SL-072-SA6-SB-4.0-5.0	Tin Zirconium	2.5U mg/Kg 2.3U mg/Kg	A	B
DE199	SL-072-SA6-SB-9.0-10.0	Tin	2.7U mg/Kg	A	B
DE199	SL-116-SA6-SB-2.5-3.5	Tin	2.5U mg/Kg	A	B
DE199	SL-118-SA6-SB-4.0-5.0	Tin	1.8U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE199	SL-118-SA6-SB-10.5-11.5	Tin Zirconium	1.9U mg/Kg 1.2U mg/Kg	A	B
DE199	SL-083-SA6-SB-4.0-5.0	Tin	2.2U mg/Kg	A	B
DE199	SL-083-SA6-SB-9.0-10.0	Tin	2.5U mg/Kg	A	B
DE199	SL-046-SA6-SS-0.0-0.5	Tin Zirconium	1.8U mg/Kg 1.4U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE199

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE199	SL-280-SA6-SS-0.0-0.5	Boron	2.9U mg/Kg	A	F
DE199	SL-300-SA6-SS-0.0-0.5	Boron	1.8U mg/Kg	A	F
DE199	SL-030-SA6-SS-0.0-0.5	Boron	3.0U mg/Kg	A	F
DE199	SL-035-SA6-SS-0.0-0.5	Boron	1.7U mg/Kg	A	F
DE199	SL-040-SA6-SS-0.0-0.5	Boron	1.8U mg/Kg	A	F
DE199	SL-047-SA6-SS-0.0-0.5	Boron	1.0U mg/Kg	A	F
DE199	SL-059-SA6-SS-0.0-0.5	Boron	0.63U mg/Kg	A	F
DE199	SL-066-SA6-SS-0.0-0.5	Boron	1.0U mg/Kg	A	F
DE199	SL-067-SA6-SS-0.0-0.5	Boron	1.3U mg/Kg	A	F
DE199	SL-278-SA6-SS-0.0-0.5	Boron	1.6U mg/Kg	A	F
DE199	SL-279-SA6-SS-0.0-0.5	Boron	2.4U mg/Kg	A	F
DE199	SL-072-SA6-SB-4.0-5.0	Boron	1.0U mg/Kg	A	F
DE199	SL-072-SA6-SB-9.0-10.0	Boron	0.77U mg/Kg	A	F
DE199	SL-116-SA6-SB-2.5-3.5	Boron	0.42U mg/Kg	A	F

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE199	SL-046-SA6-SS-0.0-0.5	Boron	0.82U mg/Kg	A	F

LDC #: 26407R4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-24-11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OC
2nd Reviewer: MG

METHOD: Metals (EPA SW 846 Method 6010B/6020/~~7000~~ 7470A/7471A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	A	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	SW	EB=20

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-280-SA6-SS-0.0-0.5	11	SL-278-SA6-SS-0.0-0.5	21	SL-046-SA6-SS-0.0-0.5	31	
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22	(#1) MS	32	
3	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-4.0-5.0	23	MSD	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-072-SA6-SB-9.0-10.0	24	DUP	34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-116-SA6-SB-2.5-3.5	25	(#8) MS	35	
6	SL-040-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-4.0-5.0	26	MSD	36	
7	SL-047-SA6-SS-0.0-0.5	17	SL-118-SA6-SB-10.5-11.5	27	DUP	37	
8	SL-059-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-4.0-5.0	28	(#13) MS	38	
9	SL-066-SA6-SS-0.0-0.5	19	SL-083-SA6-SB-9.0-10.0	29	MSD	39	
10	SL-067-SA6-SS-0.0-0.5	20	EB-SA6-SB-071311 W	30	DUP	40	

Notes: _____

DC #: 26407R4

VALIDATION FINDINGS CHECKLIST

Reviewer: QR
2nd Reviewer: MG

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?	✓			

DC #: 26407654

VALIDATION FINDINGS CHECKLIST

Reviewer: AE
2nd Reviewer: MG

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 #: 26407Y4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: MG

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-21		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
		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
SC-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
25-27		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
28-30		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 #: 26407R4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reason: B

Reviewer: CZ
2nd Reviewer: MG

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

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	20									
B		4.280		21.4	7.4									
Be			0.059	0.295										
Co			0.12	0.6										
Hg			0.089	0.445										
Sr		0.290		1.45	0.47									
V			0.13	0.65										

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

Analyte	Maximum PB[a] (mg/Kg)	Action Limit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	21
Ca	6.189	30.95																				
Fe	4.548	22.74																				
Pb	0.020	0.1																				
Mg	0.739	3.695																				
Mn	0.047	0.235																				
P	1.561	7.805																				
Sr	0.033	0.165																				
Sn	1.548	7.74	2.2	2.2	2.0	2.4	1.9	2.4	2.3	2.1	2.0	2.2	2.2	2.0	2.5	2.7	2.5	1.8	1.9	2.2	2.5	1.8
Ti	0.076	0.38																				
Zr	0.517	2.585		1.3	1.6		2.3	2.4	1.6	1.6	1.8	2.1	1.5	1.6	2.3				1.2			1.4

LDC #: 26407R4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/Kg
Soil preparation factor applied: 100x
Associated Samples: 1-12

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit										
Ti			0.39	0.195										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 13-19, 21

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit										
Ti			0.19	0.1										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 14-19, 21

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit										
As			0.57	0.57										

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 #: 26407R4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: AC
2nd Reviewer: MG

METHOD: Trace Metals (EPA SW846 6010B/7000)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target analytes detected in the field blanks? Reason: F

Blank units: ug/L **Associated sample units:** mg/Kg

Sampling date: 7/13/11 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification											
	20	Action Level	1	3	4	5	6	7	8	9	10	11	
B	7.4	3.7	2.9	1.8	3.0	1.7	1.8	1.0	0.63	1.0	1.3	1.6	
Ca	74.0	37											
Sr	0.47	0.235											

Analyte	Blank ID	Sample Identification											
	20	Action Level	12	13	14	15	21						
B	7.4	3.7	2.4	1.0	0.77	0.42	0.82						
Ca	74.0	37											
Sr	0.47	0.235											

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 #: 26107B4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: MG

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were ICP interference check samples performed as required?

(Y) N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	7/24/20/11	ICSA (22:32/01:12)	mA	4		1-4, 6, 9-16, 18, 19, 21	No Qual (<10x)

Comments: _____

LDC #: 26607R4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: CR
2nd Reviewer: MG

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
	22/23	S	Sb	22	14	28	All Soil	J/UJ/A (Q,E) (PS = 102%)
			As	127				J det/A (Q)
			Cu		65			J/UJ/A
			V	74				
	25/26	S	P	~~233~~ or 233		28		J/UJ/A ~~(E)~~ (Q,E)
			P	~~233~~				~~J det/A (Q)~~

Comments:

LDC #: 26407R4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: CR
2nd Reviewer: MG

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
		24	S	As	33 (≤20)		All Soil	J (UJ/ACE)
				Co	34		↓	↓
		27	S	Co	43		↓	↓

Comments: _____

DUP.4SW

LDC #: 26407R4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

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

An Initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found / True x 100 Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Li	59933	600	99.9	99.9	Y
ICV	ICP/MS (Initial calibration)	Ni	517.8	500	103.6	103.6	
ICV	CVAA (Initial calibration)	Hg	2.60	2.5	104.0	104.0	
CCV	ICP (Continuing calibration)	Ti	490.39	500	98.1	98.1	
CCV	ICP/MS (Continuing calibration)	V	252.90	250	101.2	101.2	
CCV	CVAA (Continuing calibration)	Hg	1.04	1	104	104	
	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 #: 26407B4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 3
Reviewer: CR
2nd Reviewer: MG

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	True / D / SDR (units) mg/kg	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Zn	20.3 ug/L	20 ug/L	101.5	101.5	Y
LCS	Laboratory control sample	Na	767.5	726	106	106	
28	Matrix spike	Hg	(SSR-SR) 0.1954	0.1703	109	109	
24	Duplicate	Zn	63.0814	72.9514	15	15	
8	ICP serial dilution	Ti	8107.42 ug/L	8317.45 ug/L	3	3	

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 #: C640 N5-1

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: MG

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 Cd were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL(2)(0.846\mu g/L)}{0.959(1.0g)(1000)} = 0.17 mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	15600	15600	Y
		Sb	0.12	0.12	
		As	5.7	5.7	
		Ba	80.0	80.0	
		Be	0.44	0.44	
		B	2.9	2.9	
		Cd	0.17	0.17	
		Ca	5650	5650	
		Cr	16.4	16.4	
		Co	6.4	6.4	
		Cu	13.1	13.1	
		Fe	24800	24800	
		Pb	7.3	7.3	
		Li	22.6	22.6	
		Mg	5470	5470	
		Mn	277	277	
		Hg	0.16	0.16	
		Mo	0.48	0.48	
		Ni	11.0	11.0	
		P	445	445	

Note:

RECALC.4SW

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: MG

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = (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:

$$Z = \frac{100\,mL\,(115.06346\,mg/L)}{0.976\,(1.01\,g)} = 11672.6\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	3890	3890	Y
		Se	0.11	0.11	
		Ag	0.044	0.044	
		Na	92.4	92.4	
		Sr	23.4	23.4	
		Tl	0.20	0.20	
		Sn	2.2	2.2	
		Ti	1020	1020	
		V	35.7	35.7	
		Zn	63.1	63.1	
		Zr	2.8	2.8	
	2	Al	11700	11700	
		Sb	0.16	0.16	
		As	14.2	14.2	
		Ba	66.3	66.3	
		Be	0.35	0.35	
		Bi	0.21	0.21	
		Ca	13300	13300	
		Cr	15.3	15.3	

Note:

RECALC.4SW

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: MG

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 = (RD)(FV)(Dil) / (In. Vol.)

Recalculation: see previous page

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)
	2	Co	16.1	16.1	Y
		Cu	24.3	24.3	
		Fe	43800	43800	
		Pb	8.5	8.5	
		Li	15.8	15.8	
		Mo	4150	4150	
		Mn	252	252	
		Hg	0.068	0.068	
		Mo	0.78	0.78	
		Ni	11.1	11.1	
		P	1780	1780	
		K	2610	2610	
		Se	0.13	0.13	
		As	0.048	0.048	
		Na	238	238	
		Sr	41.9	41.9	
		Tl	0.14	0.14	
		Sn	2.2	2.2	
		Ti	725	725	
		V	43.8	43.8	

Note: _____

RECALC.4SW

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CC
2nd reviewer: MG

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 Li were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

Recalculation:

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

$3 = \frac{100mL\ (0.16503\ mg/L)}{0.972\ (1.04g)} = 16.3\ mg/kg$

#	Sample ID	Analyte	Reported Concentration mg/kg	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	2	Zn	63.8	63.8	Y
		Cr	1.3	1.3	
	3	Al	12500	12500	
		As	4.9	4.9	
		Ba	60.4	60.4	
		Be	0.35	0.35	
		B	1.8	1.8	
		Cd	0.23	0.23	
		Ca	12800	12800	
		Cr	12.8	12.8	
		Co	5.0	5.0	
		Cu	8.9	8.9	
		Fe	28700	28700	
		Pb	6.3	6.3	
		Li	16.3	16.3	
		Mg	4770	4770	
		Mn	264	264	
		Ni	0.060	0.060	
		Mo	0.56	0.56	

Note:

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CC
2nd reviewer: MG

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 = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

Recalculation:

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

see previous page

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	3	Ni	7.6	7.6	Y
		P	927	927	
		K	3270	3270	
		Se	0.067	0.067	
		As	0.062	0.062	
		Na	161	161	
		Sr	32.8	32.8	
		Tl	0.15	0.15	
		Sn	2.0	2.0	
		Ti	870	870	
		V	25.1	25.1	
		Zn	57.7	57.7	
		Zr	1.6	1.6	

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil

Parameters: Herbicides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-046-SA6-SS-0.0-0.5
SL-280-SA6-SS-0.0-0.5MS
SL-280-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 15 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151A for Herbicides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No herbicide contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
PBLK12201	7/20/11	Dicamba MCPP 2,4,5-T	1.2 ug/Kg 470 ug/Kg 0.090 ug/Kg	All samples in SDG DE199

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-280-SA6-SS-0.0-0.5	2,4,5-T	0.16 ug/Kg	0.18U ug/Kg
SL-300-SA6-SS-0.0-0.5	Dicamba 2,4,5-T	0.66 ug/Kg 0.22 ug/Kg	1.2U ug/Kg 0.22U ug/Kg
SL-030-SA6-SS-0.0-0.5	MCPP	140 ug/Kg	260U ug/Kg
SL-047-SA6-SS-0.0-0.5	MCPP	380 ug/Kg	380U ug/Kg
SL-278-SA6-SS-0.0-0.5	MCPP	110 ug/Kg	260U ug/Kg
SL-279-SA6-SS-0.0-0.5	2,4,5-T	0.40 ug/Kg	0.40U ug/Kg

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/(Matrix Spike) 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
SL-280-SA6-SS-0.0-0.5MS/MSD (SL-280-SA6-SS-0.0-0.5)	MCPA Dinoseb	-10 (10-213) 0 (10-46)	2 (10-213) 6 (10-46)	- 200 (≤35)	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A
SL-280-SA6-SS-0.0-0.5MS/MSD (SL-280-SA6-SS-0.0-0.5)	2,4-DP 2,4,5-TP (silvex)	- -	- -	60 (≤50) 82 (≤35)	J (all detects) 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
LCS12201	2,4,5-TP	64 (68-114)	All samples in SDG DE199	J (all detects) UJ (all non-detects)	P
LCS12201	Dinoseb	6 (10-36)	All samples in SDG DE199	J (all detects) R (all non-detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-280-SA6-SS-0.0-0.5	MCPA	70.97	J (all detects)	A
SL-281-SA6-SS-0.0-0.5	MCPA	56.07	J (all detects)	A
SL-030-SA6-SS-0.0-0.5	MCPP 2,4,5-TP	43.87 91.91	J (all detects) J (all detects)	A
SL-035-SA6-SS-0.0-0.5	2,4-D	69.94	J (all detects)	A
SL-047-SA6-SS-0.0-0.5	MCPP	59.70	J (all detects)	A
SL-059-SA6-SS-0.0-0.5	MCPA	47.64	J (all detects)	A
SL-278-SA6-SS-0.0-0.5	MCPP MCPA	57.63 68.14	J (all detects) J (all detects)	A
SL-046-SA6-SS-0.0-0.5	MCPA	52.84	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5	MCPA	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE199	SL-280-SA6-SS-0.0-0.5	Dinoseb	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE199	SL-280-SA6-SS-0.0-0.5	2,4-DP 2,4,5-TP	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5	2,4,5-TP	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5	Dinoseb	J (all detects) R (all non-detects)	P	Laboratory control samples (%R) (L)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5	MCPA	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE199	SL-047-SA6-SS-0.0-0.5	MCPP	J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE199	SL-030-SA6-SS-0.0-0.5	MCPP 2,4,5-TP	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE199	SL-035-SA6-SS-0.0-0.5	2,4-D	J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)
DE199	SL-278-SA6-SS-0.0-0.5	MCPP MCPA	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*IX)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Herbicides - Laboratory Blank Data Qualification Summary - SDG DE199

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE199	SL-280-SA6-SS-0.0-0.5	2,4,5-T	0.18U ug/Kg	A	B
DE199	SL-300-SA6-SS-0.0-0.5	Dicamba 2,4,5-T	1.2U ug/Kg 0.22U ug/Kg	A	B
DE199	SL-030-SA6-SS-0.0-0.5	MCPP	260U ug/Kg	A	B
DE199	SL-047-SA6-SS-0.0-0.5	MCPP	380U ug/Kg	A	B
DE199	SL-278-SA6-SS-0.0-0.5	MCPP	260U ug/Kg	A	B
DE199	SL-279-SA6-SS-0.0-0.5	2,4,5-T	0.40U ug/Kg	A	B

Santa Susana Field Laboratory
Herbicides - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R5 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FJ
2nd Reviewer: C

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: 7/13/11
II	Initial calibration	A	%D RSD ≤20, r^2
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	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-280-SA6-SS-0.0-0.5	11	SL-278-SA6-SS-0.0-0.5	21	PBLK1220	31	
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22		32	
3	SL-300-SA6-SS-0.0-0.5	13	SL-046-SA6-SS-0.0-0.5	23		33	
4	SL-030-SA6-SS-0.0-0.5	14	# MS	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	# MSD	25		35	
6	SL-040-SA6-SS-0.0-0.5	16		26		36	
7	SL-047-SA6-SS-0.0-0.5	17		27		37	
8	SL-059-SA6-SS-0.0-0.5	18		28		38	
9	SL-066-SA6-SS-0.0-0.5	19		29		39	
10	SL-067-SA6-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 26407 R5
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FM
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 #: 26407R5
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FZ
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. 2,4-DP	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 #: 26407R5

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: EJ
2nd Reviewer: C

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

(B)

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 7/20/11 **Blank analysis date:** 7/23/11 **Associated samples:** All

Conc. units: ug/kg

Compound	Blank ID	Sample Identification						
	PBLK 1220	1	3	4	7	11	12	
G	1.2	-	0.66 / 1.24	-	-	-	-	
I	470	-	-	140 / 260U	380 / U	110 / 260U	-	
C	0.090	0.16 / 0.18U	0.22 / U	-	-		0.40 / U	

Blank extraction date: _____ **Blank analysis date:** _____ **Associated samples:** _____

Conc. units: _____

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26407R5

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	14+15	J	-10 (10-213)	2 (10-213)	( )	#1	J/R/A (Q)
		N	( )	( )	60 (50)	↓	J/Adet (Q)
		D	( )	( )	82 (35)		↓
		E	0 (10-46)	6 (10-46)	200 (↓)		J/R/A (Q)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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LDC #: 26407R5

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/2201	D	64 (68-114)	( )	( )	All	J/UJ/P (L)
		E	6 (10-36)	( )	( )	↓	J/R/P ↓
			( )	( )	( )		
			( )	( )	( )		
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LDC #: 26407R5

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	% RPD Bet 2 col. Finding ≤ 40	Associated Samples	Qualifications
	J	70.97	1	J/A det * I*
	J	56.07	2	↓
	I	43.87	4	↓
	D	91.91		
	I	167.58	5	↓
	A	69.94	↓	↓
	J	156.73	6	↓
	I	59.70	7	↓
	J	47.64	8	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26467R5

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

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".

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 (%RPD Bet 2 column ≤ 40)	Associated Samples	Qualifications
	I	57.63	11	J/A det * IX
	J	68.14		
	J	52.84	13	✓ ✓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26407R5
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 200.6/100.7 CF (std)	Recalculated 200.6/100.1 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	IH15193	7/12/11	2,4-DB ZB-XLB	7.74×10^{-2}	7.74×10^{-2}	7.67×10^{-2}	7.67×10^{-2}	7.3	7.3
			Dinoseb	3.83×10^{-1}	3.83×10^{-1}	4.26×10^{-1}	4.26×10^{-1}	15.8	15.8
			ZB-35	8.52×10^{-2}	8.52×10^{-2}	8.44×10^{-2}	8.44×10^{-2}	9.1	9.1
2			↓	3.69×10^{-1}	3.69×10^{-1}	4.08×10^{-1}	4.08×10^{-1}	14.3	14.3
3	IH15214	8/2/11	↓	8.01×10^{-2}	8.01×10^{-2}	7.80×10^{-2}	7.80×10^{-2}	7.1	7.1
			↓	3.82×10^{-1}	3.82×10^{-1}	4.26×10^{-1}	4.26×10^{-1}	17.0	17.0
			↓	8.75×10^{-2}	8.75×10^{-2}	8.63×10^{-2}	663×10^{-2}	8.6	8.6
4			↓	3.70×10^{-1}	3.70×10^{-1}	4.13×10^{-1}	4.13×10^{-1}	16.2	16.2

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 #: 26407R5
SDG #: fw 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 23:37	7/22/11	2,4-DB ZB-XLB	200.60	186.54	186.54	7.0	7.0
			Dinoseb	100.70	86.44	86.44	14.2	14.2
			ZB-35	200.6	195.04	195.04	2.8	2.8
2			↓	100.70	92.21	92.21	8.4	8.4
	CCV 5:07	7/23/11	ZB-XLB	200.6	192.02	192.02	4.3	4.3
			↓	100.70	83.95	83.95	16.6	16.6
3			ZB 35	200.6	178.95	178.95	10.8	10.8
			↓	100.70	84.45	84.45	16.1	16.1
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2,4-DCAA	ZB-XLB	6.65	9.303762	140	140	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: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 14 + 15

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)	8.29	8.29	ND	5.25	6.68	63	63	81	81	24	24
Dinoseb (8151)	14.11	14.11	ND	0	0.89	0	0	6	6	200	200
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 #: 2640 /R3
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: FJ
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/2201

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	6.6	NA	79	79				
Dinoseb (8151)	14.18	↓	0.91	↓	6	6	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 #: 26407R5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

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-T

Concentration = $\frac{954\,(100)\quad(2000)}{32485(6.65\times10^{-1})\,(60.3)(0.959)(1000)}$

= 0.153 ng/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: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil/Water

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5MS
SL-278-SA6-SS-0.0-0.5DUP
SL-030-SA6-SS-0.0-0.5MS
SL-030-SA6-SS-0.0-0.5DUP
SL-281-SA6-SS-0.0-0.5MS
SL-281-SA6-SS-0.0-0.5DUP

Introduction

This data review covers 26 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

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 EB-SA6-SB-071311 was identified as an equipment blank. No contaminant concentrations were found.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

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 DE199	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 DE199

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-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 DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R6 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-2H)
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OL
2nd Reviewer: MG

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), Perchlorate (EPA Method 314.0)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	A	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	A/	
X	Field blanks	ND	EB=20

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-280-SA6-SS-0.0-0.5	11	SL-278-SA6-SS-0.0-0.5	21	SL-046-SA6-SS-0.0-0.5	31	
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22	(XX11) MS	32	
3	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-4.0-5.0	23	↓ DUP	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-072-SA6-SB-9.0-10.0	24	(XX4) MS	34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-116-SA6-SB-2.5-3.5	25	↓ DUP	35	
6	SL-040-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-4.0-5.0	26	(XXZ) MS	36	
7	SL-047-SA6-SS-0.0-0.5	17	SL-118-SA6-SB-10.5-11.5	27	↓ DUP	37	
8	SL-059-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-4.0-5.0	28		38	
9	SL-066-SA6-SS-0.0-0.5	19	SL-083-SA6-SB-9.0-10.0	29		39	
10	SL-067-SA6-SS-0.0-0.5	20	EB-SA6-SB-071311 W	30		40	

Notes:

Method: Inorganics (EPA Method See cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	✓			
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: [illegible]

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: [illegible]
2nd Reviewer: MG

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 #: 26407R6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: AC
2nd reviewer: MG

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-3,8,12-19		pH TDS Cl (F) NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC (Cr^{6+}) (ClO_4)
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC Cr^{6+} ClO_4
4,5,7,9-11,20,21		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
6		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
Q: 22,23		pH TDS Cl F (NO_3) NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC Cr^{6+} (ClO_4)
24,25		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK (CN^-) NH_3 TKN TOC Cr^{6+} ClO_4
26,27		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 #: 26607R6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: OK
2nd Reviewer: MG

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of ClO4 was recalculated.Calibration date: 6/30/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.002	*1.000*	1.000	Y
		s2	4	0.008			
		s3	10	0.027			
		s4	25	0.07			
		s5	100	0.302			
Calibration verification	F	CCV	1.5	1.6539	110	110	
Calibration verification	NO3	↓	↓	1.5728	105	105	
Calibration verification	CN	↓	0.15	0.16330	109	109	↓

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 #: C640186

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: GR
2nd Reviewer: MG

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	10.6	10	106	-	Y
22	Matrix spike sample	Cl	(SSR-SR) 522	495	105	105	↓
23	Duplicate sample	NO3	2.3	1.8	24	25	

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 #: 26407B6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: MG

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 CrVI / F / NO3 reported with a positive detect were recalculated and verified using the following equation:

Concentration =

F: $y = 0.2706x - 0.0028$

NO_3: $y = 0.6803x - 0.0217$

CrVI: $y = 0.012x - 0.0027$

Recalculation:

F=4: $\frac{(0.039 + 0.0028)(50mL)}{0.2703(4.9g)(0.973)} = 1.6 mg/kg$

5: $NO_3 = \frac{(0.074 + 0.0217)(50mL)}{0.6803(4.9g)(0.986)} = 1.5 mg/kg$

2: $CrVI = (0.1647(82.57) - 0.22) / (24.7)(0.976) = 0.55 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
0.976	2	CrVI	0.55	0.55	Y
0.973	4	F	1.6	1.6	
		NO3	7.2	7.2	
0.986	5	NO3	1.5	1.5	
		CrVI	0.67	0.67	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil/Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-278-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
TB-071311
EB-SA6-SB-071311
EB-SA6-SS-071311

Introduction

This data review covers 8 soil samples and 3 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.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-071311 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

Samples EB-SA6-SB-071311 and EB-SA6-SS-071311 were identified as equipment blanks. No total petroleum hydrocarbons as gasoline contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

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 RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-278-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 TB-071311 EB-SA6-SB-071311 EB-SA6-SS-071311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R7 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/21/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 7/13/11
II	Initial calibration	A	% RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS ID
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	NO	TB=9 EB=10, 11

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

Validated Samples: SOIL + water

1	1	SL-278-SA6-SS-0.0-0.5	11	2	EB-SA6-SS-071311 W	21	1	BLK05	31
2	1	SL-072-SA6-SB-4.0-5.0	12			22	2	BLKNV	32
3	1	SL-072-SA6-SB-9.0-10.0	13			23			33
4	1	SL-116-SA6-SB-2.5-3.5	14			24			34
5	1	SL-118-SA6-SB-4.0-5.0	15			25			35
6	1	SL-118-SA6-SB-10.5-11.5	16			26			36
7	1	SL-083-SA6-SB-4.0-5.0	17			27			37
8	1	SL-083-SA6-SB-9.0-10.0	18			28			38
9	2	TB-071311 W	19			29			39
10	2	EB-SA6-SB-071311 W	20			30			40

Notes: _____

LDC #: 26407R7
SDG #: all waters

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FM
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 #: 26407R7
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 #: 26407R7
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 (220std)	Recalculated CF (220std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/29/10	GRU	35488	35488	37329	37329	12.7	12.7
				(5512)	(5512)				
2	ICAL	6/15/11	GRU	7581	7581	7279	7279	5.8	5.8
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407R7
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 10:25	7/18/11	GRO	220.00	200.59	200.59	8.8	8.8
2	CCV 14:28	7/15/11	GRO	550.0	498.43	498.43	9.4	9.4
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TFT	NS	845.55	887.827	105	105	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 #: 26407R1
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: FO
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 110 8012

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	8.49	8.81	77	77	80	80	4	4
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 #: 26407127
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: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil/Water

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-280-SA6-SS-0.0-0.5MS
SL-280-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 22 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

Sample EB-SA6-SB-071311 was identified as an equipment blank. No total petroleum hydrocarbons as extractable contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-280-SA6-SS-0.0-0.5MS/MSD (SL-280-SA6-SS-0.0-0.5)	Extractable fuel hydrocarbons (C8-C11)	-	0 (49-123)	200 (≤20)	J (all detects) R (all non-detects)	A

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-280-SA6-SS-0.0-0.5MS/MSD (SL-280-SA6-SS-0.0-0.5)	Extractable fuel hydrocarbons (C12-C14)	144 (49-123)	126 (49-123)	-	J (all detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5	Extractable fuel hydrocarbons (C8-C11)	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE199	SL-280-SA6-SS-0.0-0.5	Extractable fuel hydrocarbons (C12-C14)	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R8 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FJ
2nd Reviewer: A

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: 7/13/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	ICV / CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS / D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB = 20

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-280-SA6-SS-0.0-0.5 S	11	SL-278-SA6-SS-0.0-0.5	21	SL-046-SA6-SS-0.0-0.5	31	PBLK30202
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22	#/MS	32	PBLK05197
3	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-4.0-5.0	23	#/MSD	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-072-SA6-SB-9.0-10.0	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-116-SA6-SB-2.5-3.5	25		35	
6	SL-040-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-4.0-5.0	26		36	
7	SL-047-SA6-SS-0.0-0.5	17	SL-118-SA6-SB-10.5-11.5	27		37	
8	SL-059-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-4.0-5.0	28		38	
9	SL-066-SA6-SS-0.0-0.5	19	SL-083-SA6-SB-9.0-10.0	29		39	
10	SL-067-SA6-SS-0.0-0.5	20	EB-SA6-SB-071311 W	30		40	

Notes:

LDC #: 26407R8
SDG #: per memo

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: C

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26407R8
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 #: 26407R8

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	22423	EPH (C8-C11)	( )	0 (49-123)	200 (20)	#1	J/R/A (Q)
		EPH (C12-C14)	144 (49-123)	126 (49-123)	( )		J/A det (Q)
		EPH (C21-C30)	-327 (↓)	-1170 (↓)	56 (↓)		no qual parent 7/4
		EPH (C30-C40)	-511 (↓)	-105 (↓)	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407R8
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FJ
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 (288 std)	Recalculated CF (288 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	TPH J193A	7/12/11	C8 - C40	18866.84	18866.84	19634	19634	5.6	5.6
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 #: 26407R5
SDG #: per 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	ccv 10:07	7/19/11	EFH C8-C40	287.98	257.82	257.82	10.5	10.5
	ccv 21:21	7/22/11	↓	143.97	150.42	150.42	4.5	4.5
2								
	ccv 4:29	7/23/11	↓	287.98	310.23	310.23	7.7	7.7
3	ccv 9:55	7/23/11	↓	575.96	590.90	590.90	2.6	2.6
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	NS	1.0	0.715868	72	72	0
or thoterphenyl	✓	1.0	1.00	100	100	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 #:_____ VALIDATION FINDINGS WORKSHEET Page:__of__

SDG #:_____ Matrix Spike/Matrix Spike Duplicates Results Verification Reviewer:_____

2nd Reviewer:_____

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 22 + 23

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)											
EPH (C30-C40)	2.51	2.51	68.49	55.64	65.84	-51	0	-105	0	17	17

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 #: 26401K
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS30202

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 (C_{30}-C_{40})	2.51	NA	2.22	NA	88	88	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 #: 26407R8
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 C30 - C40

Concentration = $\frac{(4034222)(1000)(2)}{(19634)(60)(0.959)(1000)}$

71 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 26, 2011

Matrix: Soil/Water

Parameters: Explosives

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5MS
SL-030-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 9 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

Sample EB-SA6-SB-071311 was identified as an equipment blank. No explosive contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB-SA6-SB-071311	7/13/11	RDX	0.95 ug/L	All soil samples in SDG DE199

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. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS/D20199 (All water samples in SDG DE199)	PETN	121 (80-120)	125 (80-120)	-	J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	EB-SA6-SB-071311	PETN	J (all detects)	P	Laboratory control samples (%R) (L)
DE199	SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 EB-SA6-SB-071311	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R40 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FT
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: 7/13/11
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	A	
VII.	Laboratory control samples	SW	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	SW	EB = 7

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-030-SA6-SS-0.0-0.5 S	11	PBLK07207	21		31	
2	SL-035-SA6-SS-0.0-0.5	12	PBLK20199	22		32	
3	SL-047-SA6-SS-0.0-0.5	13		23		33	
4	SL-066-SA6-SS-0.0-0.5	14		24		34	
5	SL-067-SA6-SS-0.0-0.5	15		25		35	
6	SL-278-SA6-SS-0.0-0.5	16		26		36	
7	EB-SA6-SB-071311 W	17		27		37	
8	SL-046-SA6-SS-0.0-0.5	18		28		38	
9	#1 MS	19		29		39	
10	#1 MSD	20		30		40	

Notes:

LDC #: 26407R40
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FM
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 #: 26407R40
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.	✓			

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 #: 26407R40

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer: A

METHOD: __ GC __ HPLC

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug/L Associated sample units: ug/kg
Sampling date: 7/13/11
Field blank type: (circle one) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank
Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other:

Associated Samples: All SOILS (ND)

Compound	Blank ID	Blank ID	Sample Identification							
	7									
B	0.95									
CRQL										

Blank units: _____ Associated sample units: _____
Sampling date: _____
Field blank type: (circle one) Field Blank / Trip Blank/ Atmospheric Blank/ Ambient Blank
Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other:

Associated Samples: _____

Compound	Blank ID	Blank ID	Sample Identification							
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with compound concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 26407R40

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 20199	PETN	121 (80-129)	125 (80-129)	( )	All water	J/Pdet (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407R4C

SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: F7

2nd Reviewer: [illegible]

METHOD: GC _____ HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 499.5/500.5 CF (std)	Recalculated 499.5/500.5 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/23/11	Nitrobenzene (chrompack)	2.17×10^2	2.17×10^2	2.07×10^2	2.07×10^2	4.6	4.6
			2,4,6-TNT (Capcell)	2.04×10^2	2.04×10^2	1.99×10^2	1.99×10^2	3.1	3.1
				1.85×10^2	1.85×10^2	1.78×10^2	1.78×10^2	4.6	4.6
2				2.00×10^2	2.00×10^2	1.85×10^2	1.85×10^2	12.2	12.2
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 #: 26407R4(1)
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 20:28	7/21/11	Nitrobenzene chrompack	499.50	525.41	525.41	5.2	5.2
			2,4,6-TNT	500.50	528.66	528.66	5.6	5.6
2	ccv 20:01	7/27/11	↓	↓	517.31	517.31	3.6	3.6
			↓	↓	547.79	547.79	9.4	9.4
3	ccv 4:30	7/28/11	↓	999.00	1012.05	1012.05	1.3	1.3
			↓	1001.00	1100.26	1100.26	9.9	9.9
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 #: 26407R4C
SDG #: pw comm

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 20:28	7/21/11	Nitrobenzene chrompack	499.50	512.55	512.55	2.6	2.6
			2,4,6-TNT	500.50	515.14	515.14	2.9	2.9
2	CCV 20:01	7/27/11	↓	~~499.50~~ ~~521.00~~	521.00	521.00	4.3	4.3
			↓	500.50	513.68	513.68	2.6	2.6
3	CCV 4:30	7/28/11	↓	999.00	1077.38	1077.38	7.8	7.8
			↓	1001.00	1026.21	1026.21	2.5	2.5
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: __ GC ✓ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1

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-Nitro-m-xylene	chrompack	200 J	2612.59692	131	131	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: EZ
2nd Reviewer:

METHOD: ___ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SA = Spike added SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 9 + 10

Compound	Spike Added (ug/Kg)		Sample Conc. (ug/Kg)	Spike Sample Concentration (ug/Kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)	2000	2000	ND	1802.04	1820.66	90	90	91	91	1	1
2,4,6-Trinitrotoluene (8330)	1999.2	1999.2	↓	2162.14	2207.99	108	108	110	110	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407K4U
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS / 80 IL

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2000	NA	1921.09	NA	96					
2,4,6-Trinitrotoluene (8330)	1999.2	NA	2284.85	↓	114					

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 #: 26407R4U
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. #7 Compound Name RDX

Concentration = $\frac{4621\ (10)}{(9.75 \times 10^{1})(500)}$

$= 0.95$ ug/L

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications

Comments: [illegible]

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil/Water

Parameters: Terphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5MS
SL-300-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-281-SA6-SS-0.0-0.5	n-Triacontane-d62	1 (50-150)	All TCL compounds	J (all detects) R (all non-detects)	P
SL-300-SA6-SS-0.0-0.5	n-Triacontane-d62	26 (50-150)	All TCL compounds	J (all detects) UJ (all non-detects)	A
SL-035-SA6-SS-0.0-0.5	n-Triacontane-d62	46 (50-150)	All TCL compounds	J (all detects) UJ (all non-detects)	P

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-300-SA6-SS-0.0-0.5MS/MSD (SL-300-SA6-SS-0.0-0.5)	m-Terphenyl o-Terphenyl p-Terphenyl	31 (75-125) 36 (75-125) 34 (75-125)	56 (75-125) 64 (75-125) 60 (75-125)	57 (≤20) 57 (≤20) 57 (≤20)	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-281-SA6-SS-0.0-0.5	All TCL compounds	J (all detects) R (all non-detects)	P	Surrogate spikes (%R) (S)
DE199	SL-300-SA6-SS-0.0-0.5	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate spikes (%R) (S)
DE199	SL-035-SA6-SS-0.0-0.5	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R) (S)
DE199	SL-300-SA6-SS-0.0-0.5	m-Terphenyl o-Terphenyl p-Terphenyl	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R41 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer:

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
II	Initial calibration	A	%D RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB = 19

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

Validated Samples: SOIL + water

1 1	SL-280-SA6-SS-0.0-0.5	11	SL-279-SA6-SS-0.0-0.5	21 1	PBLK17201	31	
2 1	SL-281-SA6-SS-0.0-0.5	12	SL-072-SA6-SB-4.0-5.0	22 2	PBLK29202	32	
3 2	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-9.0-10.0	23 3	PBLK15197	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-116-SA6-SB-2.5-3.5	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-118-SA6-SB-4.0-5.0	25	#3MS	35	
6	SL-047-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-10.5-11.5	26	#3MSD	36	
7	SL-059-SA6-SS-0.0-0.5	17	SL-083-SA6-SB-4.0-5.0	27		37	
8	SL-066-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-9.0-10.0	28		38	
9	SL-067-SA6-SS-0.0-0.5	19 3	EB-SA6-SB-071311 W	29		39	
10	SL-278-SA6-SS-0.0-0.5	20	SL-046-SA6-SS-0.0-0.5	30		40	

Notes:

.DC #: 26407R41
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FJ
2nd Reviewer:

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?	-		✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26467R4 1
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 #: 26407R41

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	MS	J	1 (50-150)	J/R/P (S)
				( )	
	3	↓	↓	26 (↓)	J/UJ/P (S)
				( )	
				( )	
	5	↓	↓	46 (↓)	J/UJ/P (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane-d62	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 #: 26407R4 /

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	25 + 26	m-Terphenyl	31 (75-125)	56 (75-125)	57 (20)	3	J/UJ/A (Q)
		o-Terphenyl	36 (↓)	64 (↓)	57 (↓)	↓	↓ ↓
		P-Terphenyl	34 (↓)	60 (↓)	57 (↓)	↓	↓ ↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407R4 1
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: F?
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 (17.74/std)	Recalculated CF (17.74/std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/20/11	o-Terphenyl	2.07×10^4	2.07×10^4	1.99×10^4	1.79×10^4	2.5	2.5
2	ICAL	7/22/11	↓						
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 #: 26407R41
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 7
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 20:10	7/20/11	o-Terphenyl	35.48	34.65	34.65	2.4	2.4
	ccv 22:16	7/21/11	↓	↓	32.71	32.71	7.8	7.8
2								
	ccv 13:06	7/22/11	↓	↓	34.24	34.24	3.5	3.5
3	ccv 22:07	7/22/11	↓	↓	34.41	34.41	3.0	3.0
	ccv 5:33	7/23/11	↓	↓	34.05	34.05	4.0	4.0
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 #: 26177

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	
n-Tricontane-d62	NS	0.3335	0.273439	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

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: 25 + 26

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
m-Terphenyl	1.65	1.65	ND	0.51	0.92	31	31	56	56	57	57

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 #:_____
SDG #: 44 cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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 SOIL - LCS 1720 /

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	1.69	NA	1.38	NA	84	84	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 #: 26407R41
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil/Water

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5MS
SL-281-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 22 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Analysis	Required Holding Time (in Days) From Sample Collection Until Analysis	Flag	A or P
EB-SA6-SB-071311	All TCL compounds	8	7	J (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

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.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

Sample EB-SA6-SB-071311 was identified as an equipment blank. No alcohol contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-030-SA6-SS-0.0-0.5	Acetone	149 (42-138)	All TCL compounds	J (all detects)	A

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	EB-SA6-SB-071311	All TCL compounds	J (all detects) UJ (all non-detects)	P	Technical holding time (H)
DE199	SL-030-SA6-SS-0.0-0.5	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R43 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11

SDG #: DE199 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: EJ

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	SW	Sampling dates: 7/13/11
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/RSV	A	RRF / CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS 1P
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB 2 #20

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-280-SA6-SS-0.0-0.5 S	11	SL-278-SA6-SS-0.0-0.5	21	SL-046-SA6-SS-0.0-0.5	31	PBLK30196
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22	#2 MS	32	PBLK27201
3	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-4.0-5.0	23	#2 MSD	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-072-SA6-SB-9.0-10.0	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-116-SA6-SB-2.5-3.5	25		35	
6	SL-040-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-4.0-5.0	26		36	
7	SL-047-SA6-SS-0.0-0.5	17	SL-118-SA6-SB-10.5-11.5	27		37	
8	SL-059-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-4.0-5.0	28		38	
9	SL-066-SA6-SS-0.0-0.5	19	SL-083-SA6-SB-9.0-10.0	29		39	
10	SL-067-SA6-SS-0.0-0.5	20	EB-SA6-SB-071311 W	30		40	

Notes:

LDC #: 26407R43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: PT
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?	✓	NA		
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 #: 26407R43
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 #: 26467R43

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

All circled dates have exceeded the technical holding times.
Y N N/A Were all cooler temperatures within validation criteria?

METHOD: GC HPLC

Sample ID	Matrix	Preserved	Sampling Date	Extraction date	Analysis date	Total # of Days	Qualifier
20	W	NO	7/13/11		7/21/11	8	J/UJ/P(H
					H.T. = 7 days		

TECHNICAL HOLDING TIME CRITERIA

VOLATILES:
- Water unpreserved: Aromatic within 7 days, non-aromatic within 14 days of sample collection.
- Water preserved: Both within 14 days of sample collection.
- Soils: Both within 14 days of sample collection.

EXTRACTABLES:
- Water: Extracted within 7 days, analyzed within 40 days.
- Soil: Extracted within 14 days, analyzed within 40 days.

LDC #: 26407R43

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	Acetone	149 (42-138)	J/A det (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	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 #: 26407R43
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 (5660 std)	Recalculated (5000 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	IM27187	7/6/11	Methanol	1.35×10^{0}	1.35×10^{0}	1.40×10^{0}	1.40×10^{0}	8.5	8.5
2	IM27199A	7/18/11	↓	9.26×10^{0}	9.26×10^{0}	9.30×10^{0}	9.30×10^{0}	1.4	1.4
3	IM27200A	7/19/11	↓	9.49×10^{0}	9.49×10^{0}	9.48×10^{0}	9.42×10^{0}	2.5	2.5
4	IM27201	7/20/11	↓	6.0×10^{-1}	6.0×10^{-1}	6.37×10^{-1}	6.37×10^{-1}	8.2	8.2

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 #: 26407R43
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: EJ
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 (5mM std)	Recalculated CF (5mM std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL IM27208A	7/27/11	Methanol	6.65×10^{6}	6.65×10^{6}	6.43×10^{6}	6.43×10^{6}	2.6	2.6
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 #: 26407R43
SDG #: fw comm

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 20:10	7/16/11	Methanol	10,000.00	9385.57	9385.57	6.1	6.1
	(IM27187)							
	CCV 5:27	7/21/11	Methanol	10000.00	9427.34	9427.34	5.7	5.7
2	(IM27201)							
3	CCV 19:00	7/20/11	Methanol	5000.00	4651.58	4651.58	7.0	7.0
	(IM27201)							
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Acetone	NS	2500	2798.6/42	112	112	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SA = Spike added SC = Sample concentration

RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 22 & 23

Compound	Spike Added (ug/Kg)		Sample Conc. (ug/Kg)	Spike Sample Concentration (ug/Kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Methanol	2500	2500	ND	2110.46	2267.05	84	84	91	91	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 #: 26407R43
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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
SC = Concentration
LCS = Laboratory control sample percent recovery
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 30194

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol	250 U	NA	2182.4	NA	87	87	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26467R43
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. 18 Compound Name Methanol

Concentration = $\frac{(684)(5)}{(1.40 \times 10^{\circ})(10)(0.937)(1000)}$

= 260 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: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil/Water

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-040-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
SL-279-SA6-SS-0.0-0.5
SL-072-SA6-SB-4.0-5.0
SL-072-SA6-SB-9.0-10.0
SL-116-SA6-SB-2.5-3.5
SL-118-SA6-SB-4.0-5.0
SL-118-SA6-SB-10.5-11.5
SL-083-SA6-SB-4.0-5.0
SL-083-SA6-SB-9.0-10.0
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5
SL-280-SA6-SS-0.0-0.5MS
SL-280-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 22 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

Sample EB-SA6-SB-071311 was identified as an equipment blank. No glycol contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-280-SA6-SS-0.0-0.5MS/MSD (SL-280-SA6-SS-0.0-0.5)	Ethylene glycol Propylene glycol Diethylene glycol	49 (63-107) 57 (63-107) 22 (59-109)	- - 30 (59-109)	34 (≤20) 33 (≤20) 31 (≤20)	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5	Ethylene glycol Propylene glycol Diethylene glycol	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-040-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 SL-279-SA6-SS-0.0-0.5 SL-072-SA6-SB-4.0-5.0 SL-072-SA6-SB-9.0-10.0 SL-116-SA6-SB-2.5-3.5 SL-118-SA6-SB-4.0-5.0 SL-118-SA6-SB-10.5-11.5 SL-083-SA6-SB-4.0-5.0 SL-083-SA6-SB-9.0-10.0 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R45 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: F
2nd Reviewer: A

METHOD: GC Glycols (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/13/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB = 20

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-280-SA6-SS-0.0-0.5 S	11	SL-278-SA6-SS-0.0-0.5	21	SL-046-SA6-SS-0.0-0.5	31	PBLK03196
2	SL-281-SA6-SS-0.0-0.5	12	SL-279-SA6-SS-0.0-0.5	22	#/MS	32	PBLK01199
3	SL-300-SA6-SS-0.0-0.5	13	SL-072-SA6-SB-4.0-5.0	23	#/MSD	33	
4	SL-030-SA6-SS-0.0-0.5	14	SL-072-SA6-SB-9.0-10.0	24		34	
5	SL-035-SA6-SS-0.0-0.5	15	SL-116-SA6-SB-2.5-3.5	25		35	
6	SL-040-SA6-SS-0.0-0.5	16	SL-118-SA6-SB-4.0-5.0	26		36	
7	SL-047-SA6-SS-0.0-0.5	17	SL-118-SA6-SB-10.5-11.5	27		37	
8	SL-059-SA6-SS-0.0-0.5	18	SL-083-SA6-SB-4.0-5.0	28		38	
9	SL-066-SA6-SS-0.0-0.5	19	SL-083-SA6-SB-9.0-10.0	29		39	
10	SL-067-SA6-SS-0.0-0.5	20	EB-SA6-SB-071311 W	30		40	

Notes:

LDC #: 26407R45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: RT
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 #: 26407 R45
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 #: 26407R45

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	22+23	Ethylene glycol	49 (63-107)	( )	34 (20)	#1	J/UJ/A (2)
		Propylene glycol	57 (↓)	( )	33 (20)	↓	↓
		Diethylene glycol	22 (59-109)	30 (59-109)	31 (20)	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407J5
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (225.8262 std)	Recalculated CF (225.8262 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	GLGW192A	7/11/11	Propylene Glycol	5.41×10^2	5.41×10^2	5.43×10^2	5.43×10^2	1.5	1.5
2	GLFS194A	7/13/11	↓	7.60×10^2	7.60×10^2	7.67×10^2	7.67×10^2	2.4	2.4
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 #: 26407R4S
SDG #: per cover

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 11:01	7/18/11	Propylene Glycol	112.91	113.23	113.23	0.3	0.3
	ccv 13:15	7/15/11	↓	105.36	108.67	108.67	3.1	3.1
2								
	ccv 16:01	↓	↓	105.36	107.18	107.18	1.7	1.7
3	ccv 18:22	↓	↓	105.36	108.16	108.16	2.7	2.7
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 #:

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: ✓

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	NS	192.7	182 25/194	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 #: [illegible]
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: KZ
2nd Reviewer: [signature]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 22423

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	192.77	193.77	ND	95.09	134.15	49	49	70	70	34	34

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 #: 26407/49
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F2
2nd Reviewer:

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: lcs03196

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	192.77	NA	175.75	NA	91	91	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 #: 26407R4J
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: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil/Water

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-280-SA6-SS-0.0-0.5
SL-281-SA6-SS-0.0-0.5
SL-300-SA6-SS-0.0-0.5
SL-030-SA6-SS-0.0-0.5
SL-035-SA6-SS-0.0-0.5
SL-047-SA6-SS-0.0-0.5
SL-066-SA6-SS-0.0-0.5
SL-067-SA6-SS-0.0-0.5
SL-278-SA6-SS-0.0-0.5
EB-SA6-SB-071311
SL-046-SA6-SS-0.0-0.5

Introduction

This data review covers 10 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

Sample EB-SA6-SB-071311 was identified as an equipment blank. No formaldehyde was found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

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 RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-280-SA6-SS-0.0-0.5 SL-281-SA6-SS-0.0-0.5 SL-300-SA6-SS-0.0-0.5 SL-030-SA6-SS-0.0-0.5 SL-035-SA6-SS-0.0-0.5 SL-047-SA6-SS-0.0-0.5 SL-066-SA6-SS-0.0-0.5 SL-067-SA6-SS-0.0-0.5 SL-278-SA6-SS-0.0-0.5 EB-SA6-SB-071311 SL-046-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R71 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11

SDG #: DE199 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: 9/13/11
II	Initial calibration	A	%D ≤20
III.	Calibration verification/~~ICV~~	A	CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	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-280-SA6-SS-0.0-0.5 S	11	SL-046-SA6-SS-0.0-0.5	21	PBLK07197	31	
2	SL-281-SA6-SS-0.0-0.5	12		22	PBLK03195	32	
3	SL-300-SA6-SS-0.0-0.5	13		23		33	
4	SL-030-SA6-SS-0.0-0.5	14		24		34	
5	SL-035-SA6-SS-0.0-0.5	15		25		35	
6	SL-047-SA6-SS-0.0-0.5	16		26		36	
7	SL-066-SA6-SS-0.0-0.5	17		27		37	
8	SL-067-SA6-SS-0.0-0.5	18		28		38	
9	SL-278-SA6-SS-0.0-0.5	19		29		39	
10	EB-SA6-SB-071311 W	20		30		40	

Notes: _____

.DC #: 26407R71
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: PJ
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 #: 26407R71
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.	✓	NA	NA	
Target compounds were detected in the field blanks.		✓		

LDC #: 26407R71
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: F2
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 CF (std)	Recalculated 2002 CF (std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	IF4196	7/15/11	Formaldehyde	6.66 x10^1	6.66x10^1	6.42 x10^1	6.42 x10^1	3.1	3.1
2	IF4199	7/18/11	"	6.43x10^1	6.43x10^1	6.46 x10^1	6.46 x10^1	4.5	4.5
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 #: 26407R71
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 17:53	7/15/11	Formaldehyde	2002.00	2056.59	2056.59	2.7	2.7
2	ccv 23:43	7/18/11	↓	2002.00	1959.82	1959.82	2.1	2.1
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	NS	1950	3625.709/2	93	93	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 #: 26407R11
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: FJ
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: LCS07197

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	4958.45	NA	99	99	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 #: 26407R11
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. 4 Compound Name Formaldehyde

Concentration = $\frac{(43900)(20)}{(6.46 \times 10^{1})(20)(0.973)}$

= 698 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 13, 2011

LDC Report Date: October 24, 2011

Matrix: Soil

Parameters: Perchlorate

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE199

Sample Identification

SL-040-SA6-SS-0.0-0.5
SL-059-SA6-SS-0.0-0.5
SL-116-SA6-SB-2.5-3.5

Introduction

This data review covers 3 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE199	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 DE199

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE199	SL-040-SA6-SS-0.0-0.5 SL-059-SA6-SS-0.0-0.5 SL-116-SA6-SB-2.5-3.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE199

No Sample Data Qualified in this SDG

LDC #: 26407R87 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/24/11
SDG #: DE199 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EF
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: 7/13/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 15/50 LODY ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples:
SOIL

1	SL-040-SA6-SS-0.0-0.5	11	PBLK22213	21		31	
2	SL-059-SA6-SS-0.0-0.5	12		22		32	
3	SL-116-SA6-SB-2.5-3.5	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26407R87

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓		✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05? 15/52	✓			
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?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation and CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 26407R87
SDG# see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
08/08/2011	LCMS	perchlorate	0.035076	0.040	
			0.078526	0.100	
			0.168897	0.200	
			0.348140	0.400	
			0.903796	1.000	
			2.494629	2.500	

Regression Output:		Regression Output:	Reported	
Constant		-0.03676		
Std Err of Y Est		0.03869		
R Squared		0.99867		0.99673
No. of Observations		6.00000		
Degrees of Freedom		4.00000		
X Coefficient(s)	1.002E+000	0.12		
Std Err of Coef.	0.018309	0.02		

LDC #: 26407R87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: A

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	MS_1010	8/3/11	~~Phenol (1st internal standard)~~ Perchlorate	4.0	3.94	3.94	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			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 #: 26407R8/

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: [signature]

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 - 22213

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	114	NA	114	114	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 #: 26407R87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_t	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____ , _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)(\quad)(\quad)}$

NP

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE200

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-Jul-2011	TB-071411	6345456	TB	5030B	8015M	III
14-Jul-2011	TB-071411	6345456	TB	5030B	8260B	III
14-Jul-2011	TB-071411	6345456	TB	5030B	8260B SIM	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3050B	6010B	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3050B	6020	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3060A	7199	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3550B	8015B	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3550B	8015M	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3550B	8081A	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3550B	8082	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3550B	8151A	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3550B	8270C	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	3550B	8270C SIM	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	METHOD	300.0	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	METHOD	314.0	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	METHOD	7471A	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	METHOD	8015B	III
14-Jul-2011	SL-051-SA6-SS-0.0-0.5	6345438	N	METHOD	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	3050B	6010B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	3050B	6020	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	3060A	7199	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	3550B	8015B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	3550B	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	3550B	8082	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	3550B	8270C	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	5035	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	5035	8260B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	5035	8260B SIM	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	METHOD	300.0	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	METHOD	314.0	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	METHOD	7471A	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	METHOD	8015B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0	6345448	N	METHOD	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	3050B	6010B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	3050B	6020	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	3060A	7199	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	3550B	8015B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	3550B	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	3550B	8082	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	3550B	8270C	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	3550B	8270C SIM	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	5035	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	5035	8260B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	5035	8260B SIM	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	METHOD	300.0	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	METHOD	314.0	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	METHOD	7471A	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	METHOD	8015B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MS	6345449	MS	METHOD	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	3050B	6010B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	3550B	8015B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	3550B	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	3550B	8082	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	3550B	8270C	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	3550B	8270C SIM	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	5035	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	5035	8260B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	5035	8260B SIM	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	METHOD	7471A	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	METHOD	8015B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0MSD	6345450	MSD	METHOD	8015M	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0DUP	6345451	DUP	3050B	6010B	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0DUP	6345451	DUP	3050B	6020	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0DUP	6345451	DUP	3060A	7199	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0DUP	6345451	DUP	METHOD	300.0	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0DUP	6345451	DUP	METHOD	314.0	III
14-Jul-2011	SL-074-SA6-SB-4.0-5.0DUP	6345451	DUP	METHOD	7471A	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	3050B	6010B	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	3050B	6020	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	3060A	7199	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	3550B	8015B	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	3550B	8015M	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	3550B	8082	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	3550B	8270C	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	3550B	8270C SIM	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	5035	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	5035	8260B	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	5035	8260B SIM	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	METHOD	300.0	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	METHOD	314.0	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	METHOD	7471A	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	METHOD	8015B	III
14-Jul-2011	DUP02-SA6-QC-071411	6345455	FD	METHOD	8015M	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3050B	6010B	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3050B	6020	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3060A	7199	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3550B	8015B	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3550B	8015M	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3550B	8081A	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3550B	8082	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3550B	8151A	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3550B	8270C	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	3550B	8270C SIM	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	METHOD	300.0	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	METHOD	314.0	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	METHOD	7471A	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	METHOD	8015B	III
14-Jul-2011	SL-050-SA6-SS-0.0-0.5	6345437	N	METHOD	8015M	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	3050B	6010B	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	3050B	6020	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	3060A	7199	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	3550B	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	3550B	8015M	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	3550B	8082	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	3550B	8270C	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	3550B	8270C SIM	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	5035	8015M	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	METHOD	300.0	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	METHOD	314.0	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	METHOD	7471A	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	METHOD	8015B	III
14-Jul-2011	SL-074-SA6-SB-9.0-10.0	6345452	N	METHOD	8015M	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3050B	6010B	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3050B	6020	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3060A	7199	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3546	1625C	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3550B	8015B	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3550B	8015M	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3550B	8081A	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3550B	8082	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3550B	8151A	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3550B	8270C	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	3550B	8270C SIM	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	8330	8330A	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	METHOD	300.0	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	METHOD	314.0	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	METHOD	7471A	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	METHOD	8015M	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	METHOD	8315A	III
14-Jul-2011	SL-055-SA6-SS-0.0-0.5	6345442	N	METHOD	9012B	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3050B	6010B	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3050B	6020	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3060A	7199	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3546	1625C	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3550B	8015B	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3550B	8015M	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3550B	8081A	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3550B	8082	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3550B	8151A	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3550B	8270C	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	3550B	8270C SIM	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	8330	8330A	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	METHOD	300.0	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	METHOD	314.0	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	METHOD	7471A	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	METHOD	8015B	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	METHOD	8015M	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	METHOD	8315A	III
14-Jul-2011	SL-054-SA6-SS-0.0-0.5	6345441	N	METHOD	9012B	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3050B	6010B	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3050B	6020	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3060A	7199	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	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
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3550B	8015B	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3550B	8015M	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3550B	8081A	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3550B	8082	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3550B	8151A	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3550B	8270C	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	3550B	8270C SIM	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	8330	8330A	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	METHOD	300.0	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	METHOD	314.0	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	METHOD	7471A	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	METHOD	8015B	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	METHOD	8015M	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	METHOD	8315A	III
14-Jul-2011	SL-053-SA6-SS-0.0-0.5	6345440	N	METHOD	9012B	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3050B	6010B	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3050B	6020	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3060A	7199	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3546	1625C	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3550B	8015B	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3550B	8015M	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3550B	8081A	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3550B	8082	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3550B	8151A	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3550B	8270C	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	8330	8330A	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	METHOD	300.0	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	METHOD	314.0	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	METHOD	7471A	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	METHOD	8015B	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	METHOD	8015M	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	METHOD	8315A	III
14-Jul-2011	SL-052-SA6-SS-0.0-0.5	6345439	N	METHOD	9012B	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3050B	6010B	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3050B	6020	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3060A	7199	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3546	1625C	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3550B	8015B	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3550B	8015M	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3550B	8081A	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3550B	8082	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3550B	8151A	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3550B	8270C	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	3550B	8270C SIM	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	8330	8330A	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	METHOD	300.0	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	METHOD	314.0	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	METHOD	7471A	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	METHOD	8015B	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	METHOD	8015M	III
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	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
14-Jul-2011	SL-060-SA6-SS-0.0-0.5	6345443	N	METHOD	9012B	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	3050B	6010B	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	3050B	6020	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	3060A	7199	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	3550B	8015B	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	3550B	8015M	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	3550B	8082	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	3550B	8270C	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	3550B	8270C SIM	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	5035	8015M	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	5035	8260B	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	5035	8260B SIM	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	METHOD	300.0	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	METHOD	314.0	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	METHOD	7471A	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	METHOD	8015B	III
14-Jul-2011	SL-088-SA6-SB-4.0-5.0	6345453	N	METHOD	8015M	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	3050B	6010B	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	3050B	6020	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	3060A	7199	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	3550B	8015B	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	3550B	8015M	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	3550B	8082	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	3550B	8270C	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	3550B	8270C SIM	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	5035	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	METHOD	300.0	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	METHOD	314.0	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	METHOD	7471A	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	METHOD	8015B	III
14-Jul-2011	SL-088-SA6-SB-9.0-10.0	6345454	N	METHOD	8015M	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3050B	6010B	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3050B	6020	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3060A	7199	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3546	1625C	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3550B	8015B	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3550B	8015M	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3550B	8081A	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3550B	8082	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3550B	8151A	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3550B	8270C	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	3550B	8270C SIM	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	8330	8330A	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	METHOD	300.0	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	METHOD	314.0	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	METHOD	7471A	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	METHOD	8015B	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	METHOD	8015M	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	METHOD	8315A	III
14-Jul-2011	SL-063-SA6-SS-0.0-0.5	6345444	N	METHOD	9012B	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3050B	6010B	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	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
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3060A	7199	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3546	1625C	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3550B	8015B	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3550B	8015M	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3550B	8081A	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3550B	8082	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3550B	8151A	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3550B	8270C	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	3550B	8270C SIM	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	8330	8330A	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	METHOD	300.0	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	METHOD	314.0	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	METHOD	7471A	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	METHOD	8015B	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	METHOD	8015M	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	METHOD	8315A	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5	6345445	N	METHOD	9012B	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5DUP	P345445D272115A	DUP	METHOD	9012B	III
14-Jul-2011	SL-064-SA6-SS-0.0-0.5MS	P345445R272116A	MS	METHOD	9012B	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3050B	6010B	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3050B	6020	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3060A	7199	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3546	1625C	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3550B	8015B	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3550B	8015M	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	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
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3550B	8082	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3550B	8151A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3550B	8270C	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	3550B	8270C SIM	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	8330	8330A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	METHOD	300.0	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	METHOD	314.0	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	METHOD	7471A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	METHOD	8015B	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	METHOD	8015M	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	METHOD	8315A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5	6345434	N	METHOD	9012B	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5DUP	P345434D270303A	DUP	METHOD	300.0	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5DUP	P345434D270355A	DUP	METHOD	314.0	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5MSD	P345434M240103A	MSD	3550B	8081A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5MSD	P345434M240138A	MSD	METHOD	8315A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5MSD	P345434M241448A	MSD	3550B	8151A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5MS	P345434R240049A	MS	3550B	8081A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5MS	P345434R240119A	MS	METHOD	8315A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5MS	P345434R241420A	MS	3550B	8151A	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5MS	P345434R270318A	MS	METHOD	300.0	III
14-Jul-2011	SL-037-SA6-SS-0.0-0.5MS	P345434R270418A	MS	METHOD	314.0	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3050B	6010B	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3050B	6020	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3060A	7199	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	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
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3550B	8015B	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3550B	8015M	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3550B	8081A	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3550B	8082	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3550B	8151A	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3550B	8270C	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	3550B	8270C SIM	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	8330	8330A	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	METHOD	300.0	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	METHOD	314.0	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	METHOD	7471A	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	METHOD	8015B	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	METHOD	8015M	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	METHOD	8315A	III
14-Jul-2011	SL-049-SA6-SS-0.0-0.5	6345436	N	METHOD	9012B	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	3050B	6010B	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	3050B	6020	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	3060A	7199	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	3550B	8015B	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	3550B	8015M	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	3550B	8082	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	3550B	8270C	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	3550B	8270C SIM	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	5035	8015M	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	5035	8260B	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	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
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	METHOD	300.0	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	METHOD	314.0	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	METHOD	7471A	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	METHOD	8015B	III
14-Jul-2011	SL-071-SA6-SB-4.0-5.0	6345446	N	METHOD	8015M	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	3050B	6010B	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	3050B	6020	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	3060A	7199	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	3550B	8015B	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	3550B	8015M	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	3550B	8082	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	3550B	8270C	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	3550B	8270C SIM	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	5035	8015M	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	METHOD	300.0	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	METHOD	314.0	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	METHOD	7471A	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	METHOD	8015B	III
14-Jul-2011	SL-071-SA6-SB-6.0-7.0	6345447	N	METHOD	8015M	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3050B	6010B	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3050B	6020	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3060A	7199	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3546	1625C	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3550B	8015B	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3550B	8015M	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	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
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3550B	8082	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3550B	8151A	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3550B	8270C	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	3550B	8270C SIM	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	8330	8330A	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	METHOD	300.0	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	METHOD	314.0	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	METHOD	7471A	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	METHOD	8015B	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	METHOD	8015M	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	METHOD	8315A	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5	6345435	N	METHOD	9012B	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5MSD	P345435M261711	MSD	3546	1625C	III
14-Jul-2011	SL-048-SA6-SS-0.0-0.5MS	P345435R261652	MS	3546	1625C	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-037-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.81	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.81	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 3:46:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-049-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 2:26:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-050-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:27:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.82	U	0.82	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-051-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:07:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-052-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:17:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.82	U	0.82	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-053-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-054-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-055-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.82	U	0.82	MDL	1.0	PQL	mg/Kg	UJ	Q
Nitrate-NO3	0.98	J	0.82	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.83	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-063-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.91	J	0.84	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:29:00 *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	0.83	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 8:25:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	32900		13.6	MDL	104	PQL	mg/Kg	J	FD

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 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
BORON	1.29	J	0.375	MDL	5.21	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP02-SA6-QC-071411 ***Collected:*** 7/14/2011 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	8060		2.60	MDL	20.8	PQL	mg/Kg	J	FD
LITHIUM	17.6		0.65	MDL	2.1	PQL	mg/Kg	J	FD
MANGANESE	266		0.0375	MDL	0.521	PQL	mg/Kg	J	Q
TIN	2.73	J	0.333	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.97	J	0.479	MDL	5.21	PQL	mg/Kg	U	B

Sample ID: SL-037-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.23	J	0.367	MDL	5.10	PQL	mg/Kg	J	Z
MANGANESE	258		0.0367	MDL	0.510	PQL	mg/Kg	J	Q
SODIUM	52.9	J	6.07	MDL	102	PQL	mg/Kg	J	Z
TIN	2.34	J	0.327	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.52	J	0.469	MDL	5.10	PQL	mg/Kg	U	B

Sample ID: SL-048-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 3:46:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.99	J	0.356	MDL	4.95	PQL	mg/Kg	U	B
MANGANESE	294		0.0356	MDL	0.495	PQL	mg/Kg	J	Q
SODIUM	64.6	J	5.89	MDL	99.0	PQL	mg/Kg	J	Z
TIN	2.72	J	0.317	MDL	9.90	PQL	mg/Kg	U	B
Zirconium	2.80	J	0.455	MDL	4.95	PQL	mg/Kg	U	B

Sample ID: SL-049-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 2:26:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.57	J	0.359	MDL	4.99	PQL	mg/Kg	J	Z
MANGANESE	296		0.0359	MDL	0.499	PQL	mg/Kg	J	Q
SODIUM	67.0	J	5.94	MDL	99.8	PQL	mg/Kg	J	Z
TIN	2.68	J	0.319	MDL	9.98	PQL	mg/Kg	U	B
Zirconium	0.670	J	0.459	MDL	4.99	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-050-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:27:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.73	J	0.356	MDL	4.94	PQL	mg/Kg	U	B
MANGANESE	228		0.0356	MDL	0.494	PQL	mg/Kg	J	Q
SODIUM	62.4	J	5.88	MDL	98.8	PQL	mg/Kg	J	Z
TIN	2.37	J	0.316	MDL	9.88	PQL	mg/Kg	U	B
Zirconium	1.92	J	0.454	MDL	4.94	PQL	mg/Kg	U	B

Sample ID: SL-051-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:07:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.60	J	0.361	MDL	5.01	PQL	mg/Kg	J	Z
MANGANESE	247		0.0361	MDL	0.501	PQL	mg/Kg	J	Q
SODIUM	51.7	J	5.96	MDL	100	PQL	mg/Kg	J	Z
TIN	2.55	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	1.65	J	0.461	MDL	5.01	PQL	mg/Kg	U	B

Sample ID: SL-052-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:17:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.87	J	0.354	MDL	4.91	PQL	mg/Kg	U	B
MANGANESE	245		0.0354	MDL	0.491	PQL	mg/Kg	J	Q
SODIUM	60.1	J	5.85	MDL	98.3	PQL	mg/Kg	J	Z
TIN	2.60	J	0.314	MDL	9.83	PQL	mg/Kg	U	B
Zirconium	2.00	J	0.452	MDL	4.91	PQL	mg/Kg	U	B

Sample ID: SL-053-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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	2.79	J	0.362	MDL	5.03	PQL	mg/Kg	J	Z
MANGANESE	280		0.0362	MDL	0.503	PQL	mg/Kg	J	Q
SODIUM	69.3	J	5.98	MDL	101	PQL	mg/Kg	J	Z
TIN	2.34	J	0.322	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.96	J	0.462	MDL	5.03	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-054-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 9:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.80	J	0.362	MDL	5.03	PQL	mg/Kg	J	Z
MANGANESE	275		0.0362	MDL	0.503	PQL	mg/Kg	J	Q
SODIUM	61.5	J	5.99	MDL	101	PQL	mg/Kg	J	Z
TIN	2.73	J	0.322	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.05	J	0.463	MDL	5.03	PQL	mg/Kg	U	B

Sample ID: SL-055-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 8:53:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.94	J	0.362	MDL	5.03	PQL	mg/Kg	U	B
MANGANESE	285		0.0362	MDL	0.503	PQL	mg/Kg	J	Q
SODIUM	58.2	J	5.98	MDL	101	PQL	mg/Kg	J	Z
TIN	2.66	J	0.322	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.77	J	0.462	MDL	5.03	PQL	mg/Kg	U	B

Sample ID: SL-060-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 10:38:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.33	J	0.358	MDL	4.97	PQL	mg/Kg	J	Z
MANGANESE	272		0.0358	MDL	0.497	PQL	mg/Kg	J	Q
SODIUM	75.1	J	5.92	MDL	99.5	PQL	mg/Kg	J	Z
TIN	2.64	J	0.318	MDL	9.95	PQL	mg/Kg	U	B
Zirconium	2.12	J	0.458	MDL	4.97	PQL	mg/Kg	U	B

Sample ID: SL-063-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 11:16:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.53	J	0.365	MDL	5.07	PQL	mg/Kg	J	Z
MANGANESE	764		0.0365	MDL	0.507	PQL	mg/Kg	J	Q
TIN	3.26	J	0.325	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.47	J	0.467	MDL	5.07	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: **SL-064-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 1:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.68	J	0.368	MDL	5.11	PQL	mg/Kg	J	Z
MANGANESE	288		0.0368	MDL	0.511	PQL	mg/Kg	J	Q
SODIUM	65.0	J	6.08	MDL	102	PQL	mg/Kg	J	Z
TIN	2.72	J	0.327	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.19	J	0.470	MDL	5.11	PQL	mg/Kg	U	B

Sample ID: **SL-071-SA6-SB-4.0-5.0** ***Collected:*** **7/14/2011 2:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.83	J	1.89	MDL	26.2	PQL	mg/Kg	J	Z

Sample ID: **SL-071-SA6-SB-4.0-5.0** ***Collected:*** **7/14/2011 2:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	334		0.0377	MDL	0.524	PQL	mg/Kg	J	Q
TIN	3.00	J	0.336	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: **SL-071-SA6-SB-6.0-7.0** ***Collected:*** **7/14/2011 2:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.45	J	0.385	MDL	5.35	PQL	mg/Kg	U	B
MANGANESE	286		0.0385	MDL	0.535	PQL	mg/Kg	J	Q
TIN	2.48	J	0.342	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.64	J	0.492	MDL	5.35	PQL	mg/Kg	U	B

Sample ID: **SL-074-SA6-SB-4.0-5.0** ***Collected:*** **7/14/2011 8:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.14	J	0.376	MDL	5.22	PQL	mg/Kg	U	B
CALCIUM	4720		2.61	MDL	20.9	PQL	mg/Kg	J	FD
IRON	19500		2.72	MDL	20.9	PQL	mg/Kg	J	FD
LITHIUM	9.4		0.65	MDL	2.1	PQL	mg/Kg	J	FD
MANGANESE	164		0.0376	MDL	0.522	PQL	mg/Kg	J	Q
TIN	2.31	J	0.334	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.66	J	0.480	MDL	5.22	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-074-SA6-SB-9.0-10.0 *Collected:* 7/14/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	316		0.0387	MDL	0.537	PQL	mg/Kg	J	Q
TIN	3.42	J	0.344	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.73	J	0.494	MDL	5.37	PQL	mg/Kg	U	B

Sample ID: SL-088-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	298		0.0383	MDL	0.532	PQL	mg/Kg	J	Q
TIN	2.46	J	0.340	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.65	J	0.489	MDL	5.32	PQL	mg/Kg	U	B

Sample ID: SL-088-SA6-SB-9.0-10.0 *Collected:* 7/14/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.746	J	0.364	MDL	5.05	PQL	mg/Kg	U	B
MANGANESE	211		0.0364	MDL	0.505	PQL	mg/Kg	J	Q
TIN	2.74	J	0.323	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	3.48	J	0.465	MDL	5.05	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 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	0.129	J	0.0616	MDL	0.425	PQL	mg/Kg	J	Z, Q, E

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 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	0.733		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP02-SA6-QC-071411 ***Collected:*** 7/14/2011 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	0.246		0.0786	MDL	0.212	PQL	mg/Kg	J	Q
ARSENIC	8.85		0.0850	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.580		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E, FD
CADMIUM	0.209		0.0467	MDL	0.106	PQL	mg/Kg	J	Q, FD
CHROMIUM	14.2		0.127	MDL	0.425	PQL	mg/Kg	J	Q
COBALT	10.4		0.0212	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	14.3		0.0850	MDL	0.425	PQL	mg/Kg	J	Q, E
LEAD	9.86		0.0108	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	11.2		0.106	MDL	0.425	PQL	mg/Kg	J	Q
SILVER	0.0414	J	0.0151	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.192		0.0319	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	45.1		0.0234	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-037-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:54:00 ***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	0.0580	MDL	0.400	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-037-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:54:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.703		0.0500	MDL	0.100	PQL	mg/Kg	J	Q

Sample ID: SL-037-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:54:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0740	MDL	0.200	PQL	mg/Kg	J	Z, Q
ARSENIC	4.59		0.0800	MDL	0.400	PQL	mg/Kg	J	Q
BERYLLIUM	0.596		0.0160	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.229		0.0440	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	16.0		0.120	MDL	0.400	PQL	mg/Kg	J	Q
COBALT	5.75		0.0200	MDL	0.100	PQL	mg/Kg	J	Q
COPPER	9.11		0.0800	MDL	0.400	PQL	mg/Kg	J	Q, E
LEAD	12.5		0.0102	MDL	0.200	PQL	mg/Kg	J	Q, E
NICKEL	13.1		0.100	MDL	0.400	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-037-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 1:54:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0689	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q
THALLIUM	0.330		0.0300	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	31.5		0.0220	MDL	0.100	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 3:46:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.169	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-048-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 3:46:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.910		0.0495	MDL	0.0990	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 3:46:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.188	J	0.0733	MDL	0.198	PQL	mg/Kg	J	Z, Q
ARSENIC	6.40		0.0792	MDL	0.396	PQL	mg/Kg	J	Q
BERYLLIUM	0.660		0.0158	MDL	0.0990	PQL	mg/Kg	J	Q, E
CADMIUM	0.578		0.0436	MDL	0.0990	PQL	mg/Kg	J	Q
CHROMIUM	19.9		0.119	MDL	0.396	PQL	mg/Kg	J	Q
COBALT	7.16		0.0198	MDL	0.0990	PQL	mg/Kg	J	Q
COPPER	10.0		0.0792	MDL	0.396	PQL	mg/Kg	J	Q, E
LEAD	14.4		0.0101	MDL	0.198	PQL	mg/Kg	J	Q, E
NICKEL	15.6		0.0990	MDL	0.396	PQL	mg/Kg	J	Q
SILVER	0.177		0.0141	MDL	0.0990	PQL	mg/Kg	J	Q
THALLIUM	0.338		0.0297	MDL	0.0990	PQL	mg/Kg	J	Q
VANADIUM	36.6		0.0218	MDL	0.0990	PQL	mg/Kg	J	Q

Sample ID: SL-049-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 2:26:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.129		0.0435	MDL	0.0988	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0573	MDL	0.395	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.804		0.0494	MDL	0.0988	PQL	mg/Kg	J	Q

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0731	MDL	0.198	PQL	mg/Kg	J	Z, Q
ARSENIC	4.10		0.0790	MDL	0.395	PQL	mg/Kg	J	Q
BERYLLIUM	0.681		0.0158	MDL	0.0988	PQL	mg/Kg	J	Q, E
CHROMIUM	13.7		0.119	MDL	0.395	PQL	mg/Kg	J	Q
COBALT	5.40		0.0198	MDL	0.0988	PQL	mg/Kg	J	Q
COPPER	8.51		0.0790	MDL	0.395	PQL	mg/Kg	J	Q, E
LEAD	9.41		0.0101	MDL	0.198	PQL	mg/Kg	J	Q, E
NICKEL	11.0		0.0988	MDL	0.395	PQL	mg/Kg	J	Q
SILVER	0.0567	J	0.0140	MDL	0.0988	PQL	mg/Kg	J	Z, Q
THALLIUM	0.302		0.0296	MDL	0.0988	PQL	mg/Kg	J	Q
VANADIUM	28.1		0.0217	MDL	0.0988	PQL	mg/Kg	J	Q

Sample ID: SL-050-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:27:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.179	J	0.0584	MDL	0.403	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-050-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:27:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.520		0.0504	MDL	0.101	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: **SL-050-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.111	J	0.0745	MDL	0.201	PQL	mg/Kg	J	Z, Q
ARSENIC	6.09		0.0806	MDL	0.403	PQL	mg/Kg	J	Q
BERYLLIUM	0.506		0.0161	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	0.137		0.0443	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	14.1		0.121	MDL	0.403	PQL	mg/Kg	J	Q
COBALT	4.65		0.0201	MDL	0.101	PQL	mg/Kg	J	Q
COPPER	6.96		0.0806	MDL	0.403	PQL	mg/Kg	J	Q, E
LEAD	7.09		0.0103	MDL	0.201	PQL	mg/Kg	J	Q, E
NICKEL	8.77		0.101	MDL	0.403	PQL	mg/Kg	J	Q
SILVER	0.0328	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.270		0.0302	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	26.6		0.0222	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: **SL-051-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:07:00** ***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	0.0581	MDL	0.401	PQL	mg/Kg	J	Z, Q, E

Sample ID: **SL-051-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:07:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.723		0.0501	MDL	0.100	PQL	mg/Kg	J	Q

Sample ID: **SL-051-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:07:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.124	J	0.0741	MDL	0.200	PQL	mg/Kg	J	Z, Q
ARSENIC	6.45		0.0801	MDL	0.401	PQL	mg/Kg	J	Q
BERYLLIUM	0.571		0.0160	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.154		0.0441	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	15.8		0.120	MDL	0.401	PQL	mg/Kg	J	Q
COBALT	5.24		0.0200	MDL	0.100	PQL	mg/Kg	J	Q
COPPER	11.2		0.0801	MDL	0.401	PQL	mg/Kg	J	Q, E
LEAD	13.8		0.0102	MDL	0.200	PQL	mg/Kg	J	Q, E
NICKEL	11.0		0.100	MDL	0.401	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-051-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 8:07:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0469	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q
THALLIUM	0.316		0.0300	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	29.8		0.0220	MDL	0.100	PQL	mg/Kg	J	Q

Sample ID: SL-052-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 10:17:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.205	J	0.0581	MDL	0.401	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-052-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 10:17:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.670		0.0501	MDL	0.100	PQL	mg/Kg	J	Q

Sample ID: SL-052-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 10:17:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.137	J	0.0742	MDL	0.200	PQL	mg/Kg	J	Z, Q
ARSENIC	9.25		0.0802	MDL	0.401	PQL	mg/Kg	J	Q
BERYLLIUM	0.773		0.0160	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.139		0.0441	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	20.9		0.120	MDL	0.401	PQL	mg/Kg	J	Q
COBALT	7.40		0.0200	MDL	0.100	PQL	mg/Kg	J	Q
COPPER	10.3		0.0802	MDL	0.401	PQL	mg/Kg	J	Q, E
LEAD	11.0		0.0102	MDL	0.200	PQL	mg/Kg	J	Q, E
NICKEL	14.1		0.100	MDL	0.401	PQL	mg/Kg	J	Q
SILVER	0.0921	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q
THALLIUM	0.367		0.0301	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	39.4		0.0220	MDL	0.100	PQL	mg/Kg	J	Q

Sample ID: SL-053-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 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	0.176	J	0.0583	MDL	0.402	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-053-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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	0.659		0.0503	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-053-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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	0.118	J	0.0744	MDL	0.201	PQL	mg/Kg	J	Z, Q
ARSENIC	6.55		0.0804	MDL	0.402	PQL	mg/Kg	J	Q
BERYLLIUM	0.648		0.0161	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	0.124		0.0442	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	17.8		0.121	MDL	0.402	PQL	mg/Kg	J	Q
COBALT	5.93		0.0201	MDL	0.101	PQL	mg/Kg	J	Q
COPPER	10.7		0.0804	MDL	0.402	PQL	mg/Kg	J	Q, E
LEAD	9.42		0.0103	MDL	0.201	PQL	mg/Kg	J	Q, E
NICKEL	12.1		0.101	MDL	0.402	PQL	mg/Kg	J	Q
SILVER	0.0442	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.312		0.0302	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	34.3		0.0221	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.200	J	0.0578	MDL	0.399	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-054-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.769		0.0498	MDL	0.0996	PQL	mg/Kg	J	Q

Sample ID: SL-054-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.114	J	0.0737	MDL	0.199	PQL	mg/Kg	J	Z, Q
ARSENIC	6.59		0.0797	MDL	0.399	PQL	mg/Kg	J	Q
BERYLLIUM	0.688		0.0159	MDL	0.0996	PQL	mg/Kg	J	Q, E
CADMIUM	0.222		0.0438	MDL	0.0996	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-054-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 9:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	18.1		0.120	MDL	0.399	PQL	mg/Kg	J	Q
COBALT	6.40		0.0199	MDL	0.0996	PQL	mg/Kg	J	Q
COPPER	10.6		0.0797	MDL	0.399	PQL	mg/Kg	J	Q, E
LEAD	14.6		0.0102	MDL	0.199	PQL	mg/Kg	J	Q, E
NICKEL	13.4		0.0996	MDL	0.399	PQL	mg/Kg	J	Q
SILVER	0.0434	J	0.0141	MDL	0.0996	PQL	mg/Kg	J	Z, Q
THALLIUM	0.338		0.0299	MDL	0.0996	PQL	mg/Kg	J	Q
VANADIUM	36.2		0.0219	MDL	0.0996	PQL	mg/Kg	J	Q

Sample ID: SL-055-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:53:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.194	J	0.0566	MDL	0.390	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-055-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:53:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.600		0.0488	MDL	0.0976	PQL	mg/Kg	J	Q

Sample ID: SL-055-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:53:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0722	U	0.0722	MDL	0.195	PQL	mg/Kg	UJ	Q
ARSENIC	5.82		0.0781	MDL	0.390	PQL	mg/Kg	J	Q
BERYLLIUM	0.539		0.0156	MDL	0.0976	PQL	mg/Kg	J	Q, E
CADMIUM	0.154		0.0430	MDL	0.0976	PQL	mg/Kg	J	Q
CHROMIUM	14.3		0.117	MDL	0.390	PQL	mg/Kg	J	Q
COBALT	5.16		0.0195	MDL	0.0976	PQL	mg/Kg	J	Q
COPPER	7.43		0.0781	MDL	0.390	PQL	mg/Kg	J	Q, E
LEAD	9.88		0.010	MDL	0.195	PQL	mg/Kg	J	Q, E
NICKEL	10.3		0.0976	MDL	0.390	PQL	mg/Kg	J	Q
SILVER	0.0395	J	0.0139	MDL	0.0976	PQL	mg/Kg	J	Z, Q
THALLIUM	0.278		0.0293	MDL	0.0976	PQL	mg/Kg	J	Q
VANADIUM	29.2		0.0215	MDL	0.0976	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-060-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:38:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0594	MDL	0.410	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-060-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:38:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.871		0.0512	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-060-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:38:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.783		0.0758	MDL	0.205	PQL	mg/Kg	J	Q
ARSENIC	7.28		0.0820	MDL	0.410	PQL	mg/Kg	J	Q
BERYLLIUM	0.714		0.0164	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	0.340		0.0451	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	21.2		0.123	MDL	0.410	PQL	mg/Kg	J	Q
COBALT	6.98		0.0205	MDL	0.102	PQL	mg/Kg	J	Q
COPPER	12.6		0.0820	MDL	0.410	PQL	mg/Kg	J	Q, E
LEAD	18.8		0.0105	MDL	0.205	PQL	mg/Kg	J	Q, E
NICKEL	14.6		0.102	MDL	0.410	PQL	mg/Kg	J	Q
SILVER	0.0663	J	0.0145	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.343		0.0307	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	41.8		0.0225	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-063-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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	0.210	J	0.0589	MDL	0.406	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-063-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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	0.949		0.0507	MDL	0.101	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-063-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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	0.510		0.0751	MDL	0.203	PQL	mg/Kg	J	Q
ARSENIC	6.10		0.0812	MDL	0.406	PQL	mg/Kg	J	Q
BERYLLIUM	0.624		0.0162	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	1.15		0.0447	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	21.0		0.122	MDL	0.406	PQL	mg/Kg	J	Q
COBALT	8.19		0.0203	MDL	0.101	PQL	mg/Kg	J	Q
COPPER	25.3		0.0812	MDL	0.406	PQL	mg/Kg	J	Q, E
LEAD	20.3		0.0104	MDL	0.203	PQL	mg/Kg	J	Q, E
NICKEL	14.7		0.101	MDL	0.406	PQL	mg/Kg	J	Q
SILVER	0.102		0.0144	MDL	0.101	PQL	mg/Kg	J	Q
THALLIUM	0.272		0.0304	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	39.0		0.0223	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:29:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0925	J	0.0576	MDL	0.397	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-064-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:29:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.467		0.0496	MDL	0.0993	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:29:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.119	J	0.0735	MDL	0.199	PQL	mg/Kg	J	Z, Q
ARSENIC	4.12		0.0794	MDL	0.397	PQL	mg/Kg	J	Q
BERYLLIUM	0.474		0.0159	MDL	0.0993	PQL	mg/Kg	J	Q, E
CADMIUM	0.246		0.0437	MDL	0.0993	PQL	mg/Kg	J	Q
CHROMIUM	14.7		0.119	MDL	0.397	PQL	mg/Kg	J	Q
COBALT	4.97		0.0199	MDL	0.0993	PQL	mg/Kg	J	Q
COPPER	8.13		0.0794	MDL	0.397	PQL	mg/Kg	J	Q, E
LEAD	10.4		0.0101	MDL	0.199	PQL	mg/Kg	J	Q, E
NICKEL	10.1		0.0993	MDL	0.397	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-064-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:29:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0742	J	0.0141	MDL	0.0993	PQL	mg/Kg	J	Z, Q
THALLIUM	0.218		0.0298	MDL	0.0993	PQL	mg/Kg	J	Q
VANADIUM	29.2		0.0218	MDL	0.0993	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 2:35:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.171		0.0466	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 2:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.141	J	0.0614	MDL	0.424	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-071-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 2:35:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.67		0.0529	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 2:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.393		0.0783	MDL	0.212	PQL	mg/Kg	J	Q
ARSENIC	87.1		0.0847	MDL	0.424	PQL	mg/Kg	J	Q
BERYLLIUM	0.674		0.0169	MDL	0.106	PQL	mg/Kg	J	Q, E
CHROMIUM	19.3		0.127	MDL	0.424	PQL	mg/Kg	J	Q
COBALT	45.3		0.0212	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	20.7		0.0847	MDL	0.424	PQL	mg/Kg	J	Q, E
LEAD	9.77		0.0108	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	14.1		0.106	MDL	0.424	PQL	mg/Kg	J	Q
SILVER	0.0527	J	0.0150	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.240		0.0318	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	39.7		0.0233	MDL	0.106	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-071-SA6-SB-6.0-7.0 **Collected:** 7/14/2011 2:45:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.125	J	0.0633	MDL	0.437	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-071-SA6-SB-6.0-7.0 **Collected:** 7/14/2011 2:45:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.10		0.0546	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA6-SB-6.0-7.0 **Collected:** 7/14/2011 2:45:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.282		0.0808	MDL	0.218	PQL	mg/Kg	J	Q
ARSENIC	12.0		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.574		0.0175	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.302		0.0480	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	20.2		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COBALT	15.4		0.0218	MDL	0.109	PQL	mg/Kg	J	Q
COPPER	24.1		0.0873	MDL	0.437	PQL	mg/Kg	J	Q, E
LEAD	14.7		0.0111	MDL	0.218	PQL	mg/Kg	J	Q, E
NICKEL	15.0		0.109	MDL	0.437	PQL	mg/Kg	J	Q
SILVER	0.0592	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.229		0.0328	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	49.9		0.0240	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-074-SA6-SB-4.0-5.0 **Collected:** 7/14/2011 8:15:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.172	J	0.0611	MDL	0.422	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-074-SA6-SB-4.0-5.0 **Collected:** 7/14/2011 8:15:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.886		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-074-SA6-SB-4.0-5.0 **Collected:** 7/14/2011 8:15:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.256		0.0780	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	6.29		0.0843	MDL	0.422	PQL	mg/Kg	J	Q
BERYLLIUM	1.08		0.0169	MDL	0.105	PQL	mg/Kg	J	Q, E, FD
CADMIUM	0.116		0.0464	MDL	0.105	PQL	mg/Kg	J	Q, FD
CHROMIUM	15.1		0.127	MDL	0.422	PQL	mg/Kg	J	Q
COBALT	7.09		0.0211	MDL	0.105	PQL	mg/Kg	J	Q
COPPER	12.1		0.0843	MDL	0.422	PQL	mg/Kg	J	Q, E
LEAD	8.68		0.0108	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	10.6		0.105	MDL	0.422	PQL	mg/Kg	J	Q
SILVER	0.0372	J	0.0150	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.244		0.0316	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	38.7		0.0232	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-074-SA6-SB-9.0-10.0 **Collected:** 7/14/2011 8:35:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0617	MDL	0.425	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-074-SA6-SB-9.0-10.0 **Collected:** 7/14/2011 8:35:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.31		0.0532	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-074-SA6-SB-9.0-10.0 **Collected:** 7/14/2011 8:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.280		0.0787	MDL	0.213	PQL	mg/Kg	J	Q
ARSENIC	16.5		0.0851	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.556		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.425		0.0468	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	21.5		0.128	MDL	0.425	PQL	mg/Kg	J	Q
COBALT	19.9		0.0213	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	22.7		0.0851	MDL	0.425	PQL	mg/Kg	J	Q, E
LEAD	16.9		0.0108	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	15.0		0.106	MDL	0.425	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-074-SA6-SB-9.0-10.0 ***Collected:*** 7/14/2011 8:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0542	J	0.0151	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.237		0.0319	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	53.8		0.0234	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-088-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 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	0.116	J	0.0617	MDL	0.425	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-088-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 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	1.04		0.0532	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-088-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.460		0.0787	MDL	0.213	PQL	mg/Kg	J	Q
ARSENIC	11.2		0.0851	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.553		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.236		0.0468	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	16.9		0.128	MDL	0.425	PQL	mg/Kg	J	Q
COBALT	19.0		0.0213	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	19.8		0.0851	MDL	0.425	PQL	mg/Kg	J	Q, E
LEAD	10.3		0.0108	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	12.4		0.106	MDL	0.425	PQL	mg/Kg	J	Q
SILVER	0.0357	J	0.0151	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.205		0.0319	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	39.0		0.0234	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-088-SA6-SB-9.0-10.0 ***Collected:*** 7/14/2011 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	0.0779	J	0.0591	MDL	0.408	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-088-SA6-SB-9.0-10.0 *Collected:* 7/14/2011 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	0.659		0.0510	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-088-SA6-SB-9.0-10.0 *Collected:* 7/14/2011 10:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0755	MDL	0.204	PQL	mg/Kg	J	Z, Q
ARSENIC	5.51		0.0816	MDL	0.408	PQL	mg/Kg	J	Q
BERYLLIUM	0.719		0.0163	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	0.0795	J	0.0449	MDL	0.102	PQL	mg/Kg	J	Z, Q
CHROMIUM	18.1		0.122	MDL	0.408	PQL	mg/Kg	J	Q
COBALT	5.57		0.0204	MDL	0.102	PQL	mg/Kg	J	Q
COPPER	8.06		0.0816	MDL	0.408	PQL	mg/Kg	J	Q, E
LEAD	6.77		0.0104	MDL	0.204	PQL	mg/Kg	J	Q, E
NICKEL	11.7		0.102	MDL	0.408	PQL	mg/Kg	J	Q
SILVER	0.0349	J	0.0145	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.286		0.0306	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	36.5		0.0224	MDL	0.102	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 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	0.36	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 3:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.20	MDL	0.99	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-052-SA6-SS-0.0-0.5 **Collected: 7/14/2011 10:17:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-053-SA6-SS-0.0-0.5 **Collected: 7/14/2011 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	0.40	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA6-SS-0.0-0.5 **Collected: 7/14/2011 1:29:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA6-SB-4.0-5.0 **Collected: 7/14/2011 2:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.75	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA6-SB-6.0-7.0 **Collected: 7/14/2011 2:45:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA6-SB-4.0-5.0 **Collected: 7/14/2011 8:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA6-SB-9.0-10.0 **Collected: 7/14/2011 8:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: DUP02-SA6-QC-071411 ***Collected:*** 7/14/2011 8:25:00 ***Analysis Type:*** RES ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	2.45		0.0365	MDL	0.519	PQL	mg/Kg	J	Q, E, E, FD

Sample ID: SL-037-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0077	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z, Q, E, E

Sample ID: SL-048-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 3:46:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0555	J	0.0066	MDL	0.0945	PQL	mg/Kg	J	Z, Q, E, E

Sample ID: SL-049-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 2:26:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0069	U	0.0069	MDL	0.0986	PQL	mg/Kg	UJ	E, E

Sample ID: SL-050-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:27:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0135	J	0.0068	MDL	0.0964	PQL	mg/Kg	J	Z, Q, E, E

Sample ID: SL-051-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:07:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0153	J	0.0070	MDL	0.0990	PQL	mg/Kg	J	Z, Q, E, E

Sample ID: SL-052-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:17:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0147	J	0.0070	MDL	0.0993	PQL	mg/Kg	J	Z, Q, E, E

Sample ID: SL-053-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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
MERCURY	0.0093	J	0.0070	MDL	0.100	PQL	mg/Kg	J	Z, Q, E, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-054-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 9:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0202	J	0.0068	MDL	0.0968	PQL	mg/Kg	J	Z, Q, E, E

Sample ID: SL-055-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 8:53:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0128	J	0.0069	MDL	0.0987	PQL	mg/Kg	J	Z, Q, E, E

Sample ID: SL-060-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 10:38:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.213		0.0072	MDL	0.102	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-063-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 11:16:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.243		0.0068	MDL	0.0973	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-064-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 1:29:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0699	J	0.0068	MDL	0.0971	PQL	mg/Kg	J	Z, Q, E, E

Sample ID: SL-071-SA6-SB-4.0-5.0 **Collected:** 7/14/2011 2:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.809		0.0074	MDL	0.106	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-071-SA6-SB-6.0-7.0 **Collected:** 7/14/2011 2:45:00 **Analysis Type:** RES **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	5.07		0.0756	MDL	1.08	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-074-SA6-SB-4.0-5.0 **Collected:** 7/14/2011 8:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.647		0.0074	MDL	0.106	PQL	mg/Kg	J	Q, E, E, FD

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-074-SA6-SB-9.0-10.0 *Collected:* 7/14/2011 8:35:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	1.41		0.0383	MDL	0.544	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-088-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 10:45:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	1.75		0.0374	MDL	0.531	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-088-SA6-SB-9.0-10.0 *Collected:* 7/14/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0073	U	0.0073	MDL	0.104	PQL	mg/Kg	UJ	E, E

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-037-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	17.0	U	17.0	MDL	34.0	PQL	ng/Kg	UJ	H

Sample ID: SL-048-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 3:46:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	283		16.5	MDL	33.0	PQL	ng/Kg	U	B

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	703		16.5	MDL	33.0	PQL	ng/Kg	U	B

Sample ID: SL-052-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:17:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	616		168	MDL	335	PQL	ng/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-053-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
N-NITROSODIMETHYLAMINE	432		16.8	MDL	33.5	PQL	ng/Kg	U	B

Sample ID: SL-054-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	714		167	MDL	334	PQL	ng/Kg	U	B

Sample ID: SL-055-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	2010		168	MDL	336	PQL	ng/Kg	U	B

Sample ID: SL-060-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	736		169	MDL	337	PQL	ng/Kg	U	B

Sample ID: SL-063-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	308	J	170	MDL	339	PQL	ng/Kg	U	B

Sample ID: SL-064-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	513		169	MDL	339	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 8:25:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.1	J	2.1	MDL	6.4	PQL	mg/Kg	J	Z, FD
EFH (C21-C30)	53		2.1	MDL	6.4	PQL	mg/Kg	J	FD

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: DUP02-SA6-QC-071411 ***Collected:*** 7/14/2011 8:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	160		2.1	MDL	6.4	PQL	mg/Kg	J	FD

Sample ID: SL-037-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:54:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.99	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.90	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 3:46:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.52	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:27:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.46	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.64	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:07:00 ***Analysis Type:*** REA ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	4.1	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 9:20:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.53	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-055-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:53:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.41	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-063-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.9	J	2.1	MDL	6.2	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:29:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.46	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.78	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.0	J	0.87	MDL	2.6	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 8:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.4	U	5.4	MDL	11	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.4	U	5.4	MDL	11	PQL	mg/Kg	UJ	Q
Propylene glycol	5.4	U	5.4	MDL	11	PQL	mg/Kg	UJ	Q

Sample ID: SL-074-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 8:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.86	U	0.86	MDL	2.6	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	21		0.86	MDL	2.6	PQL	mg/Kg	J	FD
EFH (C30-C40)	61		0.86	MDL	2.6	PQL	mg/Kg	J	FD

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-037-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.45		0.067	MDL	0.35	PQL	ug/Kg	J	S
4,4'-DDT	0.68		0.067	MDL	0.35	PQL	ug/Kg	J	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-037-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	8.9		0.82	MDL	3.5	PQL	ug/Kg	J	S
DELTA-BHC	0.20		0.037	MDL	0.17	PQL	ug/Kg	J	Q, S
TOXAPHENE	14		2.2	MDL	6.7	PQL	ug/Kg	J	S

Sample ID: SL-048-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 3:46:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.071	J	0.066	MDL	0.34	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.13	J	0.066	MDL	0.34	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.11	J	0.066	MDL	0.34	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.10	J	0.066	MDL	0.34	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.039	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.13	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z
4,4'-DDT	0.21	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z

Sample ID: SL-050-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.080	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-051-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:07:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.10	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-052-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:17:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.066	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-053-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 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	0.14	U	0.14	MDL	0.35	PQL	ug/Kg	UJ	S
4,4'-DDE	0.35		0.067	MDL	0.35	PQL	ug/Kg	J	S, S
4,4'-DDT	0.60		0.067	MDL	0.35	PQL	ug/Kg	J	S, S
ALDRIN	0.067	U	0.067	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	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	0.81	U	0.81	MDL	3.5	PQL	ug/Kg	UJ	S
DELTA-BHC	0.037	U	0.037	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.045	U	0.045	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.11	U	0.11	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	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	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.35	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.12	U	0.12	MDL	0.35	PQL	ug/Kg	UJ	S
TOXAPHENE	2.2	U	2.2	MDL	6.7	PQL	ug/Kg	UJ	S

Sample ID: SL-054-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 9:20:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.041	J	0.037	MDL	0.17	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.051	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA6-SS-0.0-0.5 **Collected:** 7/14/2011 8:53:00 **Analysis Type:** REA-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.14	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-055-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.039	J	0.037	MDL	0.17	PQL	ug/Kg	J	Z
DIELDRIN	0.085	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.22	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.062	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:38:00 *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)	0.047	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-063-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	13		0.83	MDL	3.5	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 8:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	250		18	MDL	91	PQL	ug/Kg	J	FD
Aroclor 5460	210		54	MDL	180	PQL	ug/Kg	J	FD

Sample ID: SL-037-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.3	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.65	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-051-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:07:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.96	J	0.40	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-053-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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	1.3	J	0.40	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-063-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	25	J	10	MDL	34	PQL	ug/Kg	J	Z

Sample ID: SL-074-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 8:15:00 *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 1254	63		1.8	MDL	9.1	PQL	ug/Kg	J	FD
Aroclor 5460	85		5.4	MDL	18	PQL	ug/Kg	J	FD

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-037-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.1	J	0.63	MDL	1.7	PQL	ug/Kg	J	Z
DICAMBA	0.41	U	0.41	MDL	1.2	PQL	ug/Kg	R	Q
DINOSEB	0.82	U	0.82	MDL	2.4	PQL	ug/Kg	R	Q

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.086	J	0.075	MDL	0.17	PQL	ug/Kg	J	Z
DICAMBA	0.68	J	0.40	MDL	1.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8151A **Matrix:** SO

Sample ID: SL-052-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.091	J	0.083	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-053-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
MCPA	490		77	MDL	250	PQL	ug/Kg	U	B

Sample ID: SL-054-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.47	J	0.41	MDL	1.2	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.10	J	0.076	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-063-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	4.7		0.64	MDL	1.7	PQL	ug/Kg	J	S

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

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 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
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	36	U	36	MDL	180	PQL	ug/Kg	UJ	L
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Dimethylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP02-SA6-QC-071411 ***Collected:*** 7/14/2011 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
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-037-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:54:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	17	MDL	340	PQL	ug/Kg	J	Z
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: SL-048-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 3:46:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	33	U	33	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
CHRYSENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z, L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: SL-049-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 2:26:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	17	MDL	340	PQL	ug/Kg	J	Z
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-050-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:27:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: **SL-051-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:07:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: **SL-052-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 10:17:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: **SL-053-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 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
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-053-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: SL-054-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 9:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: SL-055-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:53:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: SL-060-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:38:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-063-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 11:16:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	35	U	35	MDL	170	PQL	ug/Kg	UJ	L
BENZO(G,H,I)PERYLENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	17	MDL	350	PQL	ug/Kg	J	Z
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
Dimethylphthalate	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: **SL-064-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 1:29:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	34	U	34	MDL	170	PQL	ug/Kg	UJ	L
CARBAZOLE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	L

Sample ID: **SL-071-SA6-SB-4.0-5.0** ***Collected:*** **7/14/2011 2:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	36	U	36	MDL	180	PQL	ug/Kg	UJ	L
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Dimethylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-071-SA6-SB-6.0-7.0 ***Collected:*** 7/14/2011 2:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	36	U	36	MDL	180	PQL	ug/Kg	UJ	L
BENZO(A)PYRENE	54	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	47	J	18	MDL	180	PQL	ug/Kg	J	Z
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Dimethylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	44	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	36	J	18	MDL	180	PQL	ug/Kg	J	Z, L
PYRENE	71	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-074-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 8:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	36	U	36	MDL	180	PQL	ug/Kg	UJ	L
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-074-SA6-SB-9.0-10.0 ***Collected:*** 7/14/2011 8:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	37	U	37	MDL	180	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	33	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	41	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	35	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-074-SA6-SB-9.0-10.0** ***Collected:*** **7/14/2011 8:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
CHRYSENE	34	J	18	MDL	180	PQL	ug/Kg	J	Z, L
Dimethylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
FLUORANTHENE	51	J	18	MDL	180	PQL	ug/Kg	J	Z, L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	45	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: **SL-088-SA6-SB-4.0-5.0** ***Collected:*** **7/14/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	36	U	36	MDL	180	PQL	ug/Kg	UJ	L
BENZO(G,H,I)PERYLENE	29	J	18	MDL	180	PQL	ug/Kg	J	Z
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Dimethylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: **SL-088-SA6-SB-9.0-10.0** ***Collected:*** **7/14/2011 10:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
3,5-Dimethylphenol	35	U	35	MDL	180	PQL	ug/Kg	UJ	L
CARBAZOLE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
HEXACHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 8:25:00 *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	3.4	J	1.8	MDL	8.9	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	21		3.6	MDL	8.9	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	20		3.6	MDL	8.9	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	32		3.6	MDL	8.9	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	7.0	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	12		3.6	MDL	8.9	PQL	ug/Kg	J	FD
CHRYSENE	19		1.8	MDL	8.9	PQL	ug/Kg	J	FD
FLUORANTHENE	33		3.6	MDL	8.9	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	6.3	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	3.8	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	8.5	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z, FD
PYRENE	22		3.6	MDL	8.9	PQL	ug/Kg	J	FD

Sample ID: SL-037-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.98	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.84	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.85	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.99	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.2	J	6.1	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.2	J	6.1	MDL	18	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 3:46:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	6.1	J	5.9	MDL	18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-049-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 2:26:00** ***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	0.68	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.91	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.82	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.2	J	6.0	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.6	J	6.0	MDL	18	PQL	ug/Kg	J	Z
FLUORENE	0.73	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.97	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-050-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:27:00** ***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)ANTHRACENE	0.89	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	6.1	J	6.1	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.94	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.69	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-051-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:07:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	0.74	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.54	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.8	J	6.1	MDL	18	PQL	ug/Kg	J	Z

Sample ID: **SL-052-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 10:17:00** ***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(A)PYRENE	0.74	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.1	MDL	18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-052-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:17:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	6.1	J	6.1	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.2	J	6.1	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-053-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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
CHRYSENE	2.4	J	1.7	MDL	8.3	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 9:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.84	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	16	J	6.0	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.3	J	6.0	MDL	18	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.4	J	6.0	MDL	18	PQL	ug/Kg	J	Z
NAPHTHALENE	0.90	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-055-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:53:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	0.72	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.47	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.73	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:38:00 ***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	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.71	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-063-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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
BENZO(A)PYRENE	3.8	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.1	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.6	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
CHRYSENE	6.1	J	1.7	MDL	8.6	PQL	ug/Kg	J	Z
FLUORANTHENE	6.6	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z
PYRENE	4.5	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:29:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.7	J	6.1	MDL	18	PQL	ug/Kg	J	Z
FLUORENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.81	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-071-SA6-SB-6.0-7.0 ***Collected:*** 7/14/2011 2:45:00 ***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	9.5	J	3.6	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	7.3	J	7.3	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-074-SA6-SB-4.0-5.0 ***Collected:*** 7/14/2011 8:15:00 ***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	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	2.3		0.71	MDL	1.8	PQL	ug/Kg	J	Q, Q, FD
BENZO(A)PYRENE	3.5		0.71	MDL	1.8	PQL	ug/Kg	J	Q, FD
BENZO(B)FLUORANTHENE	2.3		0.71	MDL	1.8	PQL	ug/Kg	J	Q, FD
BENZO(G,H,I)PERYLENE	0.82	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, Q, FD
BENZO(K)FLUORANTHENE	4.7		0.71	MDL	1.8	PQL	ug/Kg	J	FD
Butylbenzylphthalate	7.9	J	6.4	MDL	19	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-074-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	3.0		0.35	MDL	1.8	PQL	ug/Kg	J	Q, Q, FD
FLUORANTHENE	3.6		0.71	MDL	1.8	PQL	ug/Kg	J	Q, FD
INDENO(1,2,3-CD)PYRENE	0.74	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q, FD
NAPHTHALENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	FD
PHENANTHRENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD
PYRENE	2.6		0.71	MDL	1.8	PQL	ug/Kg	J	Q, Q, FD

Sample ID: SL-074-SA6-SB-9.0-10.0 *Collected:* 7/14/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	5.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
ANTHRACENE	5.0	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	46	J	32	MDL	97	PQL	ug/Kg	J	Z

Sample ID: SL-088-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 10:45:00 *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	4.9	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	4.0	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
PHENANTHRENE	5.7	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix:** SO

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	800	J	600	MDL	1500	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	640	J	610	MDL	1500	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory:** LL

EDD Filename: DE200_v2. **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-063-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	910	J	620	MDL	1600	PQL	ug/Kg	J	Z

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

Sample ID: SL-054-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
RDX	56	J	51	MDL	120	PQL	ug/Kg	J	Z

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

Sample ID: SL-049-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	280	J	100	MDL	500	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:38:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	S
p-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	S

Sample ID: SL-063-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.6	U	1.6	MDL	3.6	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.6	U	1.6	MDL	3.6	PQL	mg/Kg	UJ	S
p-Terphenyl	1.6	U	1.6	MDL	3.6	PQL	mg/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-064-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	190	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-074-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	110	U	110	MDL	540	PQL	ug/Kg	R	Q

Sample ID: SL-074-SA6-SB-9.0-10.0 *Collected:* 7/14/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

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

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: DUP02-SA6-QC-071411 *Collected:* 7/14/2011 8:25:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	23		6.9	MDL	8.2	PQL	ug/Kg	U	B
CHLOROFORM	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	7.5		0.25	MDL	4.1	PQL	ug/Kg	UJ	B, FD
TOLUENE	0.13	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-071-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	22		6.7	MDL	8.0	PQL	ug/Kg	U	B
CHLOROFORM	0.12	J	0.12	MDL	4.0	PQL	ug/Kg	J	Z
TOLUENE	0.10	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-074-SA6-SB-4.0-5.0 *Collected:* 7/14/2011 8:15:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	28		6.9	MDL	8.2	PQL	ug/Kg	U	B
CHLOROFORM	0.17	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-074-SA6-SB-4.0-5.0** ***Collected:*** **7/14/2011 8:15:00** ***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	82		0.25	MDL	4.1	PQL	ug/Kg	J	Q, FD
TOLUENE	0.12	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: **SL-088-SA6-SB-4.0-5.0** ***Collected:*** **7/14/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.92**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	21		6.7	MDL	8.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	5.7		0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE200

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE200 **Laboratory: LL**
EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C **Preparation Method: 3546**
Matrix: SO

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
SL-037-SA6-SS-0.0-0.5 (RES)	Sampling To Extraction	22.00	14.00	DAYS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE200 Laboratory: LL

EDD Filename: DE200_v2. eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC20B261338	8/9/2011 1:38:00 PM	N-NITROSODIMETHYLAMINE	168 ng/Kg	SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-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-048-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	283 ng/Kg	283U ng/Kg
SL-049-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	703 ng/Kg	703U ng/Kg
SL-052-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	616 ng/Kg	616U ng/Kg
SL-053-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	432 ng/Kg	432U ng/Kg
SL-054-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	714 ng/Kg	714U ng/Kg
SL-055-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	2010 ng/Kg	2010U ng/Kg
SL-060-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	736 ng/Kg	736U ng/Kg
SL-063-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	308 ng/Kg	339U ng/Kg
SL-064-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	513 ng/Kg	513U ng/Kg

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P19908CB221907	7/25/2011 7:07:00 PM	BORON CALCIUM MAGNESIUM PHOSPHORUS STRONTIUM TIN	0.456 mg/Kg 9.42 mg/Kg 0.538 mg/Kg 1.71 mg/Kg 0.0520 mg/Kg 1.58 mg/Kg	DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-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
DUP02-SA6-QC-071411(RES)	BORON	1.29 mg/Kg	1.29U mg/Kg
DUP02-SA6-QC-071411(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-037-SA6-SS-0.0-0.5(RES)	TIN	2.34 mg/Kg	2.34U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE200 Laboratory: LL

EDD Filename: DE200_v2. 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-048-SA6-SS-0.0-0.5(RES)	BORON	1.99 mg/Kg	1.99U mg/Kg
SL-048-SA6-SS-0.0-0.5(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-049-SA6-SS-0.0-0.5(RES)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-050-SA6-SS-0.0-0.5(RES)	BORON	1.73 mg/Kg	1.73U mg/Kg
SL-050-SA6-SS-0.0-0.5(RES)	TIN	2.37 mg/Kg	2.37U mg/Kg
SL-051-SA6-SS-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-052-SA6-SS-0.0-0.5(RES)	BORON	1.87 mg/Kg	1.87U mg/Kg
SL-052-SA6-SS-0.0-0.5(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-053-SA6-SS-0.0-0.5(RES)	TIN	2.34 mg/Kg	2.34U mg/Kg
SL-054-SA6-SS-0.0-0.5(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-055-SA6-SS-0.0-0.5(RES)	BORON	1.94 mg/Kg	1.94U mg/Kg
SL-055-SA6-SS-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-060-SA6-SS-0.0-0.5(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-063-SA6-SS-0.0-0.5(RES)	TIN	3.26 mg/Kg	3.26U mg/Kg
SL-064-SA6-SS-0.0-0.5(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-071-SA6-SB-4.0-5.0(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-071-SA6-SB-6.0-7.0(RES)	BORON	1.45 mg/Kg	1.45U mg/Kg
SL-071-SA6-SB-6.0-7.0(RES)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-074-SA6-SB-4.0-5.0(RES)	BORON	2.14 mg/Kg	2.14U mg/Kg
SL-074-SA6-SB-4.0-5.0(RES)	TIN	2.31 mg/Kg	2.31U mg/Kg
SL-074-SA6-SB-9.0-10.0(RES)	TIN	3.42 mg/Kg	3.42U mg/Kg
SL-088-SA6-SB-4.0-5.0(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-088-SA6-SB-9.0-10.0(RES)	BORON	0.746 mg/Kg	0.746U mg/Kg
SL-088-SA6-SB-9.0-10.0(RES)	TIN	2.74 mg/Kg	2.74U mg/Kg

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04043AB320218A	7/26/2011 2:18:00 AM	EFH (C30-C40)	1.1 mg/Kg	DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03033AB241257A	7/25/2011 12:57:00 PM	MCPA MCPP	190 ug/Kg 660 ug/Kg	SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-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-053-SA6-SS-0.0-0.5(RES)	MCPA	490 ug/Kg	490U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB21B211617A	7/20/2011 4:17:00 PM	ACETONE METHYLENE CHLORIDE	8.7 ug/Kg 0.96 ug/Kg	DUP02-SA6-QC-071411 SL-071-SA6-SB-4.0-5.0 SL-074-SA6-SB-4.0-5.0 SL-088-SA6-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP02-SA6-QC-071411(RES)	ACETONE	23 ug/Kg	23U ug/Kg
DUP02-SA6-QC-071411(RES)	METHYLENE CHLORIDE	7.5 ug/Kg	7.5U ug/Kg
SL-071-SA6-SB-4.0-5.0(RES)	ACETONE	22 ug/Kg	22U ug/Kg
SL-074-SA6-SB-4.0-5.0(RES)	ACETONE	28 ug/Kg	28U ug/Kg
SL-088-SA6-SB-4.0-5.0(RES)	ACETONE	21 ug/Kg	21U ug/Kg
SL-088-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	5.7 ug/Kg	5.7U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-074-SA6-SB-4.0-5.0MS SL-074-SA6-SB-4.0-5.0MSD (SL-074-SA6-SB-4.0-5.0)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	34 56 60	40 - -	59.00-109.00 63.00-107.00 63.00-107.00	- 22 (20.00) -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene 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-074-SA6-SB-4.0-5.0MS SL-074-SA6-SB-4.0-5.0MSD (SL-074-SA6-SB-4.0-5.0)	ETHANOL	0	6	48.00-130.00	200 (20.00)	ETHANOL	J(all detects) R(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-037-SA6-SS-0.0-0.5MSD (SL-037-SA6-SS-0.0-0.5)	ENDOSULFAN SULFATE	-	-	21.00-160.00	71 (50.00)	ENDOSULFAN SULFATE	J(all detects)
SL-037-SA6-SS-0.0-0.5MS SL-037-SA6-SS-0.0-0.5MSD (SL-037-SA6-SS-0.0-0.5)	DELTA-BHC	3	6	23.00-140.00	-	DELTA-BHC	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
SL-037-SA6-SS-0.0-0.5MSD (SL-037-SA6-SS-0.0-0.5)	2,4-D MCPA	- -	- -	17.00-180.00 10.00-213.00	45 (35.00) 56 (50.00)	2,4-D MCPA	J(all detects)
SL-037-SA6-SS-0.0-0.5MS SL-037-SA6-SS-0.0-0.5MSD (SL-037-SA6-SS-0.0-0.5)	DICAMBA DINOSEB	200 0	0 0	10.00-190.00 10.00-46.00	200 (50.00) -	DICAMBA DINOSEB	J(all detects) R(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-074-SA6-SB-4.0-5.0MS SL-074-SA6-SB-4.0-5.0MSD (SL-074-SA6-SB-4.0-5.0)	EFH (C15-C20)	153	307	49.00-123.00	67 (20.00)	EFH (C15-C20)	J(all detects) MSD Diluted Out
SL-074-SA6-SB-4.0-5.0MS SL-074-SA6-SB-4.0-5.0MSD (SL-074-SA6-SB-4.0-5.0)	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	- -573 -1480 -	0 841 2368 0	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	200 (20.00) 134 (20.00) 142 (20.00) 200 (20.00)	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	No Qual, MDS Diluted Out, MS >4x

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

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **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-074-SA6-SB-4.0-5.0MS SL-074-SA6-SB-4.0-5.0MSD (SL-074-SA6-SB-4.0-5.0)	AROCLOR 1260	200	155	39.00-149.00	-	AROCLOR 1260	No Qual, Diluted Out

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-074-SA6-SB-4.0-5.0MS	ARSENIC	231	141	75.00-125.00	-	ARSENIC	
SL-074-SA6-SB-4.0-5.0MSD	BERYLLIUM	170	132	75.00-125.00	-	BERYLLIUM	
(DUP02-SA6-QC-071411	CADMIUM	190	157	75.00-125.00	-	CADMIUM	
SL-037-SA6-SS-0.0-0.5	CHROMIUM	195	139	75.00-125.00	-	CHROMIUM	
SL-048-SA6-SS-0.0-0.5	COBALT	168	135	75.00-125.00	-	COBALT	
SL-049-SA6-SS-0.0-0.5	NICKEL	209	158	75.00-125.00	-	NICKEL	
SL-050-SA6-SS-0.0-0.5	SILVER	164	138	75.00-125.00	-	SILVER	
SL-051-SA6-SS-0.0-0.5	THALLIUM	178	144	75.00-125.00	-	THALLIUM	
SL-052-SA6-SS-0.0-0.5	VANADIUM	292	173	75.00-125.00	-	VANADIUM	J(all detects)
SL-053-SA6-SS-0.0-0.5	ZINC	362	222	75.00-125.00	-	ZINC	
SL-054-SA6-SS-0.0-0.5							
SL-055-SA6-SS-0.0-0.5							
SL-060-SA6-SS-0.0-0.5							
SL-063-SA6-SS-0.0-0.5							
SL-064-SA6-SS-0.0-0.5							Zn, No Qual, >4x
SL-071-SA6-SB-4.0-5.0							
SL-071-SA6-SB-6.0-7.0							
SL-074-SA6-SB-4.0-5.0							
SL-074-SA6-SB-9.0-10.0							
SL-088-SA6-SB-4.0-5.0							
SL-088-SA6-SB-9.0-10.0)							
SL-074-SA6-SB-4.0-5.0MS	ANTIMONY	69	59	75.00-125.00	-	ANTIMONY	
SL-074-SA6-SB-4.0-5.0MSD	COPPER	215	153	75.00-125.00	21 (20.00)	COPPER	
(DUP02-SA6-QC-071411	LEAD	305	197	75.00-125.00	21 (20.00)	LEAD	
SL-037-SA6-SS-0.0-0.5							
SL-048-SA6-SS-0.0-0.5							
SL-049-SA6-SS-0.0-0.5							
SL-050-SA6-SS-0.0-0.5							
SL-051-SA6-SS-0.0-0.5							
SL-052-SA6-SS-0.0-0.5							
SL-053-SA6-SS-0.0-0.5							
SL-054-SA6-SS-0.0-0.5							J(all detects)
SL-055-SA6-SS-0.0-0.5							UJ(all non-detects)
SL-060-SA6-SS-0.0-0.5							
SL-063-SA6-SS-0.0-0.5							
SL-064-SA6-SS-0.0-0.5							
SL-071-SA6-SB-4.0-5.0							
SL-071-SA6-SB-6.0-7.0							
SL-074-SA6-SB-4.0-5.0							
SL-074-SA6-SB-9.0-10.0							
SL-088-SA6-SB-4.0-5.0							
SL-088-SA6-SB-9.0-10.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **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-074-SA6-SB-4.0-5.0MS **SL-074-SA6-SB-4.0-5.0MSD** (DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	SELENIUM	159	-	75.00-125.00	24 (20.00)	SELENIUM	J(all detects) UJ(all non-detects)
SL-074-SA6-SB-4.0-5.0MS **SL-074-SA6-SB-4.0-5.0MSD** (DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	MOLYBDENUM	168	138	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-074-SA6-SB-4.0-5.0MS **SL-074-SA6-SB-4.0-5.0MSD** (DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	BARIUM	408	276	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **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-074-SA6-SB-4.0-5.0MS **SL-074-SA6-SB-4.0-5.0MSD** (DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	MAGNESIUM MANGANESE	475 -	627 127	75.00-125.00 75.00-125.00	- -	MAGNESIUM MANGANESE	J(all detects) Mg, No Qual, >4x
SL-074-SA6-SB-4.0-5.0MS **SL-074-SA6-SB-4.0-5.0MSD** (DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	CALCIUM IRON	29 -357	57 420	75.00-125.00 75.00-125.00	- -	CALCIUM IRON	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-074-SA6-SB-4.0-5.0MSD (DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	MERCURY	-	402	65.00-135.00	48 (20.00)	MERCURY	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-074-SA6-SB-4.0-5.0MSD	4-CHLOROANILINE	-	-	13.00-107.00	32 (30.00)	4-CHLOROANILINE	J(all detects)
(SL-074-SA6-SB-4.0-5.0)	BENZIDINE	-	-	35.00-141.00	43 (30.00)	BENZIDINE	

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-074-SA6-SB-4.0-5.0MS	BENZO(A)ANTHRACENE	-	174	59.00-128.00	35 (30.00)	BENZO(A)ANTHRACENE	J(all detects)
SL-074-SA6-SB-4.0-5.0MSD	BENZO(A)PYRENE	-	172	45.00-138.00	-	BENZO(A)PYRENE	
(SL-074-SA6-SB-4.0-5.0)	BENZO(B)FLUORANTHENE	177	194	43.00-155.00	-	BENZO(B)FLUORANTHENE	
	BENZO(G,H,I)PERYLENE	-	-	33.00-141.00	87 (30.00)	BENZO(G,H,I)PERYLENE	
	CHRYSENE	-	173	48.00-134.00	38 (30.00)	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	-	-	22.00-133.00	70 (30.00)	DIBENZO(A,H)ANTHRACENE	
	Di-n-octylphthalate	217	-	40.00-192.00	82 (30.00)	Di-n-octylphthalate	
	FLUORANTHENE	-	195	26.00-166.00	-	FLUORANTHENE	
	INDENO(1,2,3-CD)PYRENE	-	157	21.00-143.00	88 (30.00)	INDENO(1,2,3-CD)PYRENE	
	PYRENE	-	201	15.00-153.00	52 (30.00)	PYRENE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **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-074-SA6-SB-4.0-5.0MS SL-074-SA6-SB-4.0-5.0MSD (DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	ALUMINUM TITANIUM	1545 141	2297 244	75.00-125.00 75.00-125.00	- -	ALUMINUM 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-037-SA6-SS-0.0-0.5MS (SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5)	FLUORIDE	64	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-074-SA6-SB-4.0-5.0MS (SL-074-SA6-SB-4.0-5.0)	1,2-DICHLOROETHANE	135	-	68.00-131.00	-	1,2-DICHLOROETHANE	J(all detects)
SL-074-SA6-SB-4.0-5.0MS SL-074-SA6-SB-4.0-5.0MSD (SL-074-SA6-SB-4.0-5.0)	METHYLENE CHLORIDE	-119	-156	61.00-141.00	-	METHYLENE CHLORIDE	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 314.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-074-SA6-SB-4.0-5.0DUP (DUP02-SA6-QC-071411 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	PERCHLORATE	200	20.00	No Qual, OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-074-SA6-SB-4.0-5.0DUP (DUP02-SA6-QC-071411	ANTIMONY	49	20.00	
	BERYLLIUM	46	20.00	
SL-037-SA6-SS-0.0-0.5	CADMIUM	31	20.00	
SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5				J(all detects) UJ(all non-detects)
SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)				Sb, Cd, No Qual, OK by Difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-074-SA6-SB-4.0-5.0DUP (DUP02-SA6-QC-071411 SL-037-SA6-SS-0.0-0.5 SL-048-SA6-SS-0.0-0.5 SL-049-SA6-SS-0.0-0.5 SL-050-SA6-SS-0.0-0.5 SL-051-SA6-SS-0.0-0.5 SL-052-SA6-SS-0.0-0.5 SL-053-SA6-SS-0.0-0.5 SL-054-SA6-SS-0.0-0.5 SL-055-SA6-SS-0.0-0.5 SL-060-SA6-SS-0.0-0.5 SL-063-SA6-SS-0.0-0.5 SL-064-SA6-SS-0.0-0.5 SL-071-SA6-SB-4.0-5.0 SL-071-SA6-SB-6.0-7.0 SL-074-SA6-SB-4.0-5.0 SL-074-SA6-SB-9.0-10.0 SL-088-SA6-SB-4.0-5.0 SL-088-SA6-SB-9.0-10.0)	MERCURY	54	20.00	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **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
P11992AQ320759A	DIETHYLENE GLYCOL	145	-	75.00-125.00	-	DIETHYLENE GLYCOL	
(DUP02-SA6-QC-071411	ETHYLENE GLYCOL	143	-	65.00-122.00	-	ETHYLENE GLYCOL	
SL -037-SA6-SS-0.0-0.5	Propylene glycol	133	-	75.00-125.00	-	Propylene glycol	
SL -048-SA6-SS-0.0-0.5							
SL -049-SA6-SS-0.0-0.5							
SL -050-SA6-SS-0.0-0.5							
SL -051-SA6-SS-0.0-0.5							
SL -052-SA6-SS-0.0-0.5							
SL -053-SA6-SS-0.0-0.5							
SL -054-SA6-SS-0.0-0.5							
SL -055-SA6-SS-0.0-0.5							J (all detects)
SL -060-SA6-SS-0.0-0.5							
SL -063-SA6-SS-0.0-0.5							
SL -064-SA6-SS-0.0-0.5							
SL -071-SA6-SB-4.0-5.0							
SL -071-SA6-SB-6.0-7.0							
SL -074-SA6-SB-4.0-5.0							
SL -074-SA6-SB-9.0-10.0							
SL -088-SA6-SB-4.0-5.0							
SL -088-SA6-SB-9.0-10.0)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P19908CQ221911	IRON	144	-	80.00-120.00	-	IRON	
(DUP02-SA6-QC-071411	MAGNESIUM	134	-	80.00-120.00	-	MAGNESIUM	
SL -037-SA6-SS-0.0-0.5	POTASSIUM	129	-	80.00-120.00	-	POTASSIUM	
SL -048-SA6-SS-0.0-0.5							
SL -049-SA6-SS-0.0-0.5							
SL -050-SA6-SS-0.0-0.5							
SL -051-SA6-SS-0.0-0.5							
SL -052-SA6-SS-0.0-0.5							
SL -053-SA6-SS-0.0-0.5							
SL -054-SA6-SS-0.0-0.5							
SL -055-SA6-SS-0.0-0.5							No Qual, SRM within QC Limits
SL -060-SA6-SS-0.0-0.5							
SL -063-SA6-SS-0.0-0.5							
SL -064-SA6-SS-0.0-0.5							
SL -071-SA6-SB-4.0-5.0							
SL -071-SA6-SB-6.0-7.0							
SL -074-SA6-SB-4.0-5.0							
SL -074-SA6-SB-9.0-10.0							
SL -088-SA6-SB-4.0-5.0							
SL -088-SA6-SB-9.0-10.0)							

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

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **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
P2LALCSQ261121	1,2,4-TRICHLOROBENZENE	72	-	73.00-108.00	-	1,2,4-TRICHLOROBENZENE	
(DUP02-SA6-QC-071411	1,2-DICHLOROBENZENE	73	-	74.00-99.00	-	1,2-DICHLOROBENZENE	
SL-037-SA6-SS-0.0-0.5	1,4-DICHLOROBENZENE	71	-	74.00-106.00	-	1,4-DICHLOROBENZENE	
SL-048-SA6-SS-0.0-0.5	3,5-Dimethylphenol	79	-	83.00-120.00	-	3,5-Dimethylphenol	
SL-049-SA6-SS-0.0-0.5	ACENAPHTHENE	75	-	76.00-111.00	-	ACENAPHTHENE	
SL-050-SA6-SS-0.0-0.5	CARBAZOLE	75	-	77.00-113.00	-	CARBAZOLE	
SL-051-SA6-SS-0.0-0.5	CHRYSENE	70	-	76.00-113.00	-	CHRYSENE	
SL-052-SA6-SS-0.0-0.5	Dimethylphthalate	76	-	77.00-109.00	-	Dimethylphthalate	
SL-053-SA6-SS-0.0-0.5	Di-n-butylphthalate	76	-	79.00-112.00	-	Di-n-butylphthalate	
SL-054-SA6-SS-0.0-0.5	FLUORANTHENE	77	-	78.00-116.00	-	FLUORANTHENE	J(all detects)
SL-055-SA6-SS-0.0-0.5	HEXACHLOROBENZENE	72	-	73.00-119.00	-	HEXACHLOROBENZENE	UJ(all non-detects)
SL-060-SA6-SS-0.0-0.5	PHENANTHRENE	74	-	77.00-113.00	-	PHENANTHRENE	
SL-063-SA6-SS-0.0-0.5	PYRENE	73	-	75.00-115.00	-	PYRENE	
SL-064-SA6-SS-0.0-0.5							
SL-071-SA6-SB-4.0-5.0							
SL-071-SA6-SB-6.0-7.0							
SL-074-SA6-SB-4.0-5.0							
SL-074-SA6-SB-9.0-10.0							
SL-088-SA6-SB-4.0-5.0							
SL-088-SA6-SB-9.0-10.0)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20708AQ221414	TITANIUM	145	-	80.00-120.00	-	TITANIUM	
(DUP02-SA6-QC-071411							
SL-037-SA6-SS-0.0-0.5							
SL-048-SA6-SS-0.0-0.5							
SL-049-SA6-SS-0.0-0.5							
SL-050-SA6-SS-0.0-0.5							
SL-051-SA6-SS-0.0-0.5							
SL-052-SA6-SS-0.0-0.5							
SL-053-SA6-SS-0.0-0.5							No Qual,
SL-054-SA6-SS-0.0-0.5							SRM within QC
SL-055-SA6-SS-0.0-0.5							Limits
SL-060-SA6-SS-0.0-0.5							
SL-063-SA6-SS-0.0-0.5							
SL-064-SA6-SS-0.0-0.5							
SL-071-SA6-SB-4.0-5.0							
SL-071-SA6-SB-6.0-7.0							
SL-074-SA6-SB-4.0-5.0							
SL-074-SA6-SB-9.0-10.0							
SL-088-SA6-SB-4.0-5.0							
SL-088-SA6-SB-9.0-10.0)							

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB21Q211642A	1,2-DIBROMO-3-CHLOROPROP	121	-	58.00-120.00	-	1,2-DIBROMO-3-CHLOROPRO	
(DUP02-SA6-QC-071411							
SL-071-SA6-SB-4.0-5.0							J(all detects)
SL-074-SA6-SB-4.0-5.0							
SL-088-SA6-SB-4.0-5.0)							

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

Surrogate Outlier Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-060-SA6-SS-0.0 -0.5	n-Triacontane-d62	39	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-063-SA6-SS-0.0 -0.5	n-Triacontane-d62	34	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-037-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	121	20.00-120.00	All Target Analytes	J (all detects)
SL-053-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	122	20.00-120.00	All Target Analytes	J(all detects)
SL-053-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	49	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-063-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	162	20.00-120.00	All Target Analytes	J(all detects)

Method: 8151A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-063-SA6-SS-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: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
MOISTURE	7.0	6.8	3		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
FLUORIDE	2.6	2.3	12	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
ALUMINUM	13000	11700	11	50.00	
BORON	2.14	1.29	50	50.00	
MAGNESIUM	4220	5050	18	50.00	
MANGANESE	164	266	47	50.00	
PHOSPHORUS	377	422	11	50.00	
POTASSIUM	2330	2610	11	50.00	No Qualifiers Applied
SODIUM	306	316	3	50.00	
STRONTIUM	29.6	32.6	10	50.00	
TIN	2.31	2.73	17	50.00	
TITANIUM	891	757	16	50.00	
Zirconium	2.66	2.97	11	50.00	
CALCIUM	4720	8060	52	50.00	J(all detects)
IRON	19500	32900	51	50.00	
LITHIUM	9.4	17.6	61	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
ANTIMONY	0.256	0.246	4	50.00	
ARSENIC	6.29	8.85	34	50.00	
BARIUM	83.2	79.8	4	50.00	
CHROMIUM	15.1	14.2	6	50.00	
COBALT	7.09	10.4	38	50.00	
COPPER	12.1	14.3	17	50.00	
LEAD	8.68	9.86	13	50.00	
MOLYBDENUM	0.886	0.733	19	50.00	No Qualifiers Applied
NICKEL	10.6	11.2	6	50.00	
SELENIUM	0.172	0.129	29	50.00	
SILVER	0.0372	0.0414	11	50.00	
THALLIUM	0.244	0.192	24	50.00	
VANADIUM	38.7	45.1	15	50.00	
ZINC	56.7	61.3	8	50.00	
BERYLLIUM	1.08	0.580	60	50.00	J(all detects)
CADMIUM	0.116	0.209	57	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
HEXAVALENT CHROMIUM	0.38	0.36	5	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
MERCURY	0.647	2.45	116	50.00	J(all detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
EFH (C15-C20)	2.6 U	3.1	200	50.00	J(all detects) UJ(all non-detects)
EFH (C21-C30)	21	53	86	50.00	
EFH (C30-C40)	61	160	90	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
AROCLOR 1254	63	250	119	50.00	J(all detects)
Aroclor 5460	85	210	85	50.00	

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
ACETONE	28	23	20	50.00	No Qualifiers Applied
TOLUENE	0.12	0.13	8	50.00	
CHLOROFORM	0.17	4.1 U	200	50.00	J(all detects) UJ(all non-detects)
METHYLENE CHLORIDE	82	7.5	166	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
ANTHRACENE	1.8 U	3.4	200	50.00	
BENZO(A)ANTHRACENE	2.3	21	161	50.00	
BENZO(A)PYRENE	3.5	20	140	50.00	
BENZO(B)FLUORANTHENE	2.3	32	173	50.00	
BENZO(G,H,I)PERYLENE	0.82	7.0	158	50.00	
BENZO(K)FLUORANTHENE	4.7	12	87	50.00	J(all detects)
CHRYSENE	3.0	19	145	50.00	UJ(all non-detects)
FLUORANTHENE	3.6	33	161	50.00	
INDENO(1,2,3-CD)PYRENE	0.74	6.3	158	50.00	
NAPHTHALENE	1.8 U	3.8	200	50.00	
PHENANTHRENE	1.3	8.5	147	50.00	
PYRENE	2.6	22	158	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-074-SA6-SB-4.0-5.0	DUP02-SA6-QC-071411			
PH	8.83	8.77	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-063-SA6-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	308	339	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA6-SS-0.0-0.5	Nitrate-NO3	J	1.3	1.5	PQL	mg/Kg	J (all detects)
SL-055-SA6-SS-0.0-0.5	Nitrate-NO3	J	0.98	1.5	PQL	mg/Kg	J (all detects)
SL-063-SA6-SS-0.0-0.5	FLUORIDE	J	0.91	1.1	PQL	mg/Kg	J (all detects)
SL-064-SA6-SS-0.0-0.5	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA6-QC-071411	BORON	J	1.29	5.21	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	10.4	PQL	mg/Kg	
	Zirconium	J	2.97	5.21	PQL	mg/Kg	
SL-037-SA6-SS-0.0-0.5	BORON	J	4.23	5.10	PQL	mg/Kg	J (all detects)
	SODIUM	J	52.9	102	PQL	mg/Kg	
	TIN	J	2.34	10.2	PQL	mg/Kg	
	Zirconium	J	1.52	5.10	PQL	mg/Kg	
SL-048-SA6-SS-0.0-0.5	BORON	J	1.99	4.95	PQL	mg/Kg	J (all detects)
	SODIUM	J	64.6	99.0	PQL	mg/Kg	
	TIN	J	2.72	9.90	PQL	mg/Kg	
	Zirconium	J	2.80	4.95	PQL	mg/Kg	
SL-049-SA6-SS-0.0-0.5	BORON	J	2.57	4.99	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.0	99.8	PQL	mg/Kg	
	TIN	J	2.68	9.98	PQL	mg/Kg	
	Zirconium	J	0.670	4.99	PQL	mg/Kg	
SL-050-SA6-SS-0.0-0.5	BORON	J	1.73	4.94	PQL	mg/Kg	J (all detects)
	SODIUM	J	62.4	98.8	PQL	mg/Kg	
	TIN	J	2.37	9.88	PQL	mg/Kg	
	Zirconium	J	1.92	4.94	PQL	mg/Kg	
SL-051-SA6-SS-0.0-0.5	BORON	J	2.60	5.01	PQL	mg/Kg	J (all detects)
	SODIUM	J	51.7	100	PQL	mg/Kg	
	TIN	J	2.55	10.0	PQL	mg/Kg	
	Zirconium	J	1.65	5.01	PQL	mg/Kg	
SL-052-SA6-SS-0.0-0.5	BORON	J	1.87	4.91	PQL	mg/Kg	J (all detects)
	SODIUM	J	60.1	98.3	PQL	mg/Kg	
	TIN	J	2.60	9.83	PQL	mg/Kg	
	Zirconium	J	2.00	4.91	PQL	mg/Kg	
SL-053-SA6-SS-0.0-0.5	BORON	J	2.79	5.03	PQL	mg/Kg	J (all detects)
	SODIUM	J	69.3	101	PQL	mg/Kg	
	TIN	J	2.34	10.1	PQL	mg/Kg	
	Zirconium	J	1.96	5.03	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA6-SS-0.0-0.5	BORON	J	2.80	5.03	PQL	mg/Kg	J (all detects)
	SODIUM	J	61.5	101	PQL	mg/Kg	
	TIN	J	2.73	10.1	PQL	mg/Kg	
	Zirconium	J	2.05	5.03	PQL	mg/Kg	
SL-055-SA6-SS-0.0-0.5	BORON	J	1.94	5.03	PQL	mg/Kg	J (all detects)
	SODIUM	J	58.2	101	PQL	mg/Kg	
	TIN	J	2.66	10.1	PQL	mg/Kg	
	Zirconium	J	1.77	5.03	PQL	mg/Kg	
SL-060-SA6-SS-0.0-0.5	BORON	J	3.33	4.97	PQL	mg/Kg	J (all detects)
	SODIUM	J	75.1	99.5	PQL	mg/Kg	
	TIN	J	2.64	9.95	PQL	mg/Kg	
	Zirconium	J	2.12	4.97	PQL	mg/Kg	
SL-063-SA6-SS-0.0-0.5	BORON	J	4.53	5.07	PQL	mg/Kg	J (all detects)
	TIN	J	3.26	10.1	PQL	mg/Kg	
	Zirconium	J	1.47	5.07	PQL	mg/Kg	
SL-064-SA6-SS-0.0-0.5	BORON	J	2.68	5.11	PQL	mg/Kg	J (all detects)
	SODIUM	J	65.0	102	PQL	mg/Kg	
	TIN	J	2.72	10.2	PQL	mg/Kg	
	Zirconium	J	2.19	5.11	PQL	mg/Kg	
SL-071-SA6-SB-4.0-5.0	BORON	J	2.83	26.2	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	10.5	PQL	mg/Kg	
SL-071-SA6-SB-6.0-7.0	BORON	J	1.45	5.35	PQL	mg/Kg	J (all detects)
	TIN	J	2.48	10.7	PQL	mg/Kg	
	Zirconium	J	1.64	5.35	PQL	mg/Kg	
SL-074-SA6-SB-4.0-5.0	BORON	J	2.14	5.22	PQL	mg/Kg	J (all detects)
	TIN	J	2.31	10.4	PQL	mg/Kg	
	Zirconium	J	2.66	5.22	PQL	mg/Kg	
SL-074-SA6-SB-9.0-10.0	TIN	J	3.42	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.73	5.37	PQL	mg/Kg	
SL-088-SA6-SB-4.0-5.0	TIN	J	2.46	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.65	5.32	PQL	mg/Kg	
SL-088-SA6-SB-9.0-10.0	BORON	J	0.746	5.05	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	10.1	PQL	mg/Kg	
	Zirconium	J	3.48	5.05	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA6-QC-071411	SELENIUM	J	0.129	0.425	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0414	0.106	PQL	mg/Kg	
SL-037-SA6-SS-0.0-0.5	ANTIMONY	J	0.180	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.178	0.400	PQL	mg/Kg	
	SILVER	J	0.0689	0.100	PQL	mg/Kg	
SL-048-SA6-SS-0.0-0.5	ANTIMONY	J	0.188	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.169	0.396	PQL	mg/Kg	
SL-049-SA6-SS-0.0-0.5	ANTIMONY	J	0.127	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.132	0.395	PQL	mg/Kg	
	SILVER	J	0.0567	0.0988	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA6-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.111 0.179 0.0328	0.201 0.403 0.101	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-051-SA6-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.124 0.220 0.0469	0.200 0.401 0.100	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-052-SA6-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.137 0.205 0.0921	0.200 0.401 0.100	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-053-SA6-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.118 0.176 0.0442	0.201 0.402 0.101	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-054-SA6-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.114 0.200 0.0434	0.199 0.399 0.0996	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-055-SA6-SS-0.0-0.5	SELENIUM SILVER	J J	0.194 0.0395	0.390 0.0976	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-060-SA6-SS-0.0-0.5	SELENIUM SILVER	J J	0.157 0.0663	0.410 0.102	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-063-SA6-SS-0.0-0.5	SELENIUM	J	0.210	0.406	PQL	mg/Kg	J (all detects)
SL-064-SA6-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.119 0.0925 0.0742	0.199 0.397 0.0993	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-071-SA6-SB-4.0-5.0	SELENIUM SILVER	J J	0.141 0.0527	0.424 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-071-SA6-SB-6.0-7.0	SELENIUM SILVER	J J	0.125 0.0592	0.437 0.109	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-074-SA6-SB-4.0-5.0	SELENIUM SILVER	J J	0.172 0.0372	0.422 0.105	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-074-SA6-SB-9.0-10.0	SELENIUM SILVER	J J	0.132 0.0542	0.425 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-088-SA6-SB-4.0-5.0	SELENIUM SILVER	J J	0.116 0.0357	0.425 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-088-SA6-SB-9.0-10.0	ANTIMONY CADMIUM SELENIUM SILVER	J J J J	0.139 0.0795 0.0779 0.0349	0.204 0.102 0.408 0.102	PQL PQL PQL PQL	mg/Kg mg/Kg mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA6-QC-071411	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-048-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	0.99	PQL	mg/Kg	J (all detects)
SL-050-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.42	1.0	PQL	mg/Kg	J (all detects)
SL-052-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.0	PQL	mg/Kg	J (all detects)
SL-053-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.0	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-064-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.0	PQL	mg/Kg	J (all detects)
SL-071-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.75	1.1	PQL	mg/Kg	J (all detects)
SL-071-SA6-SB-6.0-7.0	HEXAVALENT CHROMIUM	J	0.65	1.1	PQL	mg/Kg	J (all detects)
SL-074-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-074-SA6-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA6-SS-0.0-0.5	MERCURY	J	0.0077	0.101	PQL	mg/Kg	J (all detects)
SL-048-SA6-SS-0.0-0.5	MERCURY	J	0.0555	0.0945	PQL	mg/Kg	J (all detects)
SL-050-SA6-SS-0.0-0.5	MERCURY	J	0.0135	0.0964	PQL	mg/Kg	J (all detects)
SL-051-SA6-SS-0.0-0.5	MERCURY	J	0.0153	0.0990	PQL	mg/Kg	J (all detects)
SL-052-SA6-SS-0.0-0.5	MERCURY	J	0.0147	0.0993	PQL	mg/Kg	J (all detects)
SL-053-SA6-SS-0.0-0.5	MERCURY	J	0.0093	0.100	PQL	mg/Kg	J (all detects)
SL-054-SA6-SS-0.0-0.5	MERCURY	J	0.0202	0.0968	PQL	mg/Kg	J (all detects)
SL-055-SA6-SS-0.0-0.5	MERCURY	J	0.0128	0.0987	PQL	mg/Kg	J (all detects)
SL-064-SA6-SS-0.0-0.5	MERCURY	J	0.0699	0.0971	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA6-SS-0.0-0.5	Isopropanol	J	280	500	PQL	ug/Kg	J (all detects)
SL-064-SA6-SS-0.0-0.5	Isopropanol	J	190	510	PQL	ug/Kg	J (all detects)
SL-074-SA6-SB-9.0-10.0	METHANOL	J	240	550	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA6-QC-071411	EFH (C15-C20)	J	3.1	6.4	PQL	mg/Kg	J (all detects)
SL-037-SA6-SS-0.0-0.5	EFH (C12-C14) EFH (C8-C11)	J J	0.99 0.90	1.2 1.2	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-048-SA6-SS-0.0-0.5	EFH (C15-C20)	J	0.52	1.2	PQL	mg/Kg	J (all detects)
SL-050-SA6-SS-0.0-0.5	EFH (C12-C14) EFH (C8-C11)	J J	0.46 0.64	1.2 1.2	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-051-SA6-SS-0.0-0.5	EFH (C8-C11)	J	4.1	6.1	PQL	mg/Kg	J (all detects)
SL-054-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.53	1.2	PQL	mg/Kg	J (all detects)
SL-055-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.41	1.2	PQL	mg/Kg	J (all detects)
SL-063-SA6-SS-0.0-0.5	EFH (C15-C20)	J	4.9	6.2	PQL	mg/Kg	J (all detects)
SL-064-SA6-SS-0.0-0.5	EFH (C12-C14) EFH (C8-C11)	J J	0.46 0.78	1.2 1.2	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-071-SA6-SB-4.0-5.0	EFH (C15-C20)	J	1.0	2.6	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA6-SS-0.0-0.5	4,4'-DDE ENDOSULFAN II ENDRIN ALDEHYDE ENDRIN KETONE HEPTACHLOR EPOXIDE	J J J J J	0.071 0.13 0.11 0.10 0.039	0.34 0.34 0.34 0.34 0.17	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-049-SA6-SS-0.0-0.5	4,4'-DDE 4,4'-DDT	J J	0.13 0.21	0.34 0.34	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-050-SA6-SS-0.0-0.5	HEPTACHLOR	J	0.080	0.17	PQL	ug/Kg	J (all detects)
SL-051-SA6-SS-0.0-0.5	HEPTACHLOR EPOXIDE	J	0.10	0.17	PQL	ug/Kg	J (all detects)
SL-052-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.066	0.17	PQL	ug/Kg	J (all detects)
SL-054-SA6-SS-0.0-0.5	DELTA-BHC HEPTACHLOR EPOXIDE	J J	0.041 0.051	0.17 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-055-SA6-SS-0.0-0.5	DELTA-BHC DIELDRIN ENDOSULFAN II ENDRIN ALDEHYDE HEPTACHLOR EPOXIDE	J J J J J	0.039 0.085 0.14 0.22 0.062	0.17 0.35 0.35 0.35 0.17	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-060-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.047	0.17	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA6-SS-0.0-0.5	Aroclor 5460	J	1.3	3.4	PQL	ug/Kg	J (all detects)
SL-049-SA6-SS-0.0-0.5	AROCLOR 1260	J	0.65	1.7	PQL	ug/Kg	J (all detects)
SL-051-SA6-SS-0.0-0.5	AROCLOR 1260	J	0.96	1.7	PQL	ug/Kg	J (all detects)
SL-053-SA6-SS-0.0-0.5	AROCLOR 1260	J	1.3	1.7	PQL	ug/Kg	J (all detects)
SL-063-SA6-SS-0.0-0.5	Aroclor 5460	J	25	34	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA6-SS-0.0-0.5	2,4-DB	J	1.1	1.7	PQL	ug/Kg	J (all detects)
SL-049-SA6-SS-0.0-0.5	2,4,5-TP (Silvex) DICAMBA	J J	0.086 0.68	0.17 1.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-052-SA6-SS-0.0-0.5	2,4,5-T	J	0.091	0.17	PQL	ug/Kg	J (all detects)
SL-054-SA6-SS-0.0-0.5	DICAMBA	J	0.47	1.2	PQL	ug/Kg	J (all detects)
SL-055-SA6-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.10	0.17	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA6-QC-071411	TOLUENE	J	0.13	4.1	PQL	ug/Kg	J (all detects)
SL-071-SA6-SB-4.0-5.0	CHLOROFORM TOLUENE	J J	0.12 0.10	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-074-SA6-SB-4.0-5.0	CHLOROFORM TOLUENE	J J	0.17 0.12	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	340	PQL	ug/Kg	J (all detects)
SL-048-SA6-SS-0.0-0.5	CHRYSENE	J	17	170	PQL	ug/Kg	J (all detects)
SL-049-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	340	PQL	ug/Kg	J (all detects)
SL-063-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE BIS(2-ETHYLHEXYL)PHTHALATE	J J	18 30	170 350	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-071-SA6-SB-6.0-7.0	BENZO(A)PYRENE BENZO(G,H,I)PERYLENE INDENO(1,2,3-CD)PYRENE PHENANTHRENE PYRENE	J J J J J	54 47 44 36 71	180 180 180 180 180	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-074-SA6-SB-9.0-10.0	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(G,H,I)PERYLENE CHRYSENE FLUORANTHENE INDENO(1,2,3-CD)PYRENE PYRENE	J J J J J J J J	33 33 41 35 34 51 21 45	180 180 180 180 180 180 180 180	PQL PQL PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-088-SA6-SB-4.0-5.0	BENZO(G,H,I)PERYLENE INDENO(1,2,3-CD)PYRENE	J J	29 21	180 180	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA6-QC-071411	ANTHRACENE	J	3.4	8.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	7.0	8.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.3	8.9	PQL	ug/Kg	
	NAPHTHALENE	J	3.8	8.9	PQL	ug/Kg	
	PHENANTHRENE	J	8.5	8.9	PQL	ug/Kg	
SL-037-SA6-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.98	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.84	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.85	1.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.99	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.2	18	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.7	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.2	18	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.7	PQL	ug/Kg	
	PYRENE	J	1.3	1.7	PQL	ug/Kg	
SL-048-SA6-SS-0.0-0.5	Butylbenzylphthalate	J	6.1	18	PQL	ug/Kg	J (all detects)
SL-049-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.68	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.91	1.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.82	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	18	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.7	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.6	18	PQL	ug/Kg	
	FLUORENE	J	0.73	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.97	1.7	PQL	ug/Kg	
	PYRENE	J	1.6	1.7	PQL	ug/Kg	
SL-050-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.89	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	6.1	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.94	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.69	1.7	PQL	ug/Kg	
SL-051-SA6-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	0.74	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.54	1.7	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.8	18	PQL	ug/Kg	
SL-052-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	0.74	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	18	PQL	ug/Kg	
	Butylbenzylphthalate	J	6.1	18	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.7	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.2	18	PQL	ug/Kg	
SL-053-SA6-SS-0.0-0.5	CHRYSENE	J	2.4	8.3	PQL	ug/Kg	J (all detects)
SL-054-SA6-SS-0.0-0.5	ANTHRACENE	J	0.84	1.7	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	16	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.3	18	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.4	18	PQL	ug/Kg	
	NAPHTHALENE	J	0.90	1.7	PQL	ug/Kg	
SL-055-SA6-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	0.72	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.47	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.73	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE200 **Laboratory: LL**

EDD Filename: DE200_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-060-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.4	1.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	
	PYRENE	J	0.71	1.7	PQL	ug/Kg	
SL-063-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	3.8	8.6	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	6.1	8.6	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	7.6	8.6	PQL	ug/Kg	
	CHRYSENE	J	6.1	8.6	PQL	ug/Kg	
	FLUORANTHENE	J	6.6	8.6	PQL	ug/Kg	
	PYRENE	J	4.5	8.6	PQL	ug/Kg	
SL-064-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	18	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.7	18	PQL	ug/Kg	
	FLUORENE	J	1.1	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.81	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.7	PQL	ug/Kg	
SL-071-SA6-SB-6.0-7.0	ANTHRACENE	J	9.5	18	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	7.3	18	PQL	ug/Kg	
SL-074-SA6-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	0.82	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	7.9	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.74	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.8	PQL	ug/Kg	
SL-074-SA6-SB-9.0-10.0	ACENAPHTHENE	J	5.7	9.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	5.0	9.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	46	97	PQL	ug/Kg	
SL-088-SA6-SB-4.0-5.0	ANTHRACENE	J	4.9	9.0	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	4.0	9.0	PQL	ug/Kg	
	PHENANTHRENE	J	5.7	9.0	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA6-SS-0.0-0.5	FORMALDEHYDE	J	800	1500	PQL	ug/Kg	J (all detects)
SL-054-SA6-SS-0.0-0.5	FORMALDEHYDE	J	640	1500	PQL	ug/Kg	J (all detects)
SL-063-SA6-SS-0.0-0.5	FORMALDEHYDE	J	910	1600	PQL	ug/Kg	J (all detects)

Method: 8330A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA6-SS-0.0-0.5	RDX	J	56	120	PQL	ug/Kg	J (all detects)

LDC #: 26407S4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/21-11
SDG #: DE200 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer: MG

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

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

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

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

Validated Samples:

1	SL-037-SA6-SS-0.0-0.5	11	SL-063-SA6-SS-0.0-0.5	21	SL-074-SA6-SB-4.0-5.0MSD	31	
2	SL-048-SA6-SS-0.0-0.5	12	SL-064-SA6-SS-0.0-0.5	22	SL-074-SA6-SB-4.0-5.0DUP	32	
3	SL-049-SA6-SS-0.0-0.5	13	SL-071-SA6-SB-4.0-5.0	23		33	
4	SL-050-SA6-SS-0.0-0.5	14	SL-071-SA6-SB-6.0-7.0	24		34	
5	SL-051-SA6-SS-0.0-0.5	15	SL-074-SA6-SB-4.0-5.0 D	25		35	
6	SL-052-SA6-SS-0.0-0.5	16	SL-074-SA6-SB-9.0-10.0	26		36	
7	SL-053-SA6-SS-0.0-0.5	17	SL-088-SA6-SB-4.0-5.0	27		37	
8	SL-054-SA6-SS-0.0-0.5	18	SL-088-SA6-SB-9.0-10.0	28		38	
9	SL-055-SA6-SS-0.0-0.5	19	DUP02-SA6-QC-071411 D	29		39	
10	SL-060-SA6-SS-0.0-0.5	20	SL-074-SA6-SB-4.0-5.0MS	30		40	

Notes: _____

LDC #: 26407S4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS:2xdil
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: All

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19
Zr	7.3	3.65	1.5	2.8	0.67	1.9	1.7	2.0	2.0	2.0	1.8	2.1	1.5	2.2	1.6	2.7	2.7	1.6	3.5	3.0

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A (MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE200
Matrix: SOIL Level (low/med): LOW

74X

Background Lab Sample ID: 6345448BKG Matrix Spike Lab Sample ID: 6345449MS Matrix Spike Duplicate Lab Sample ID: 6345450MSD
% Solids for Sample: 93.0
Batch Id(s): P20708A, P19926B, P19908C, P19911C

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum		12955.0827		16212.6787		17894.9720		210.8370	215.0538	MG/KG	1545		2297		10			20	P
Antimony	121	0.2555		1.1282		1.0051		1.2650	1.2650	MG/KG	69	N	59	N	12		75 - 125	20	MS
Arsenic	75	6.2872		11.1512		9.2621		2.1084	2.1084	MG/KG	231	N	141	N	19		75 - 125	20	MS
Barium	137	83.1963		126.2070		112.2707		10.5419	10.5419	MG/KG	408		276		12			20	MS
Beryllium	9	1.0837		2.5132		2.1990		0.8433	0.8433	MG/KG	170	N	132	N	13		75 - 125	20	MS
Boron		2.1380	B	202.8558		204.4222		210.8370	208.7901	MG/KG	95		97		1		84 - 115	20	P
Cadmium	111	0.1162		2.1210		1.7702		1.0542	1.0542	MG/KG	190	N	157	N	18		75 - 125	20	MS
Calcium		4724.0985		4847.0367		4964.0996		421.6740	417.5801	MG/KG	29		57		2			20	P
Chromium	52	15.1254		35.6525		29.7913		10.5419	10.5419	MG/KG	195	N	139	N	18		75 - 125	20	MS
Cobalt	59	7.0947		95.6146		78.0519		52.7093	52.7093	MG/KG	168	N	135	N	20		75 - 125	20	MS
Copper	63	12.0831		34.7249		28.2311		10.5419	10.5419	MG/KG	215	N	153	N	21	*	75 - 125	20	MS
Iron		19452.1881		19075.7664		19890.6556		105.4185	104.3950	MG/KG	-357		420		4			20	P
Lead	208	8.6802		18.3196		14.9020		3.1626	3.1626	MG/KG	305	N	197	N	21	*	75 - 125	20	MS
Lithium		9.4363		118.2047		118.9989		105.4185	104.3950	MG/KG	103		105		1		82 - 114	20	P
Magnesium		4224.0537		5226.1838		5534.1915		210.8370	208.7901	MG/KG	475		627		6			20	P
Manganese		163.8282		204.6279		229.8632		52.7093	52.1975	MG/KG	77		127	N	12		75 - 125	20	P
Mercury		0.6466		0.8240		1.3447		0.1682	0.1735	MG/KG	105		402	N	48	*	65 - 135	20	CV
Molybdenum	98	0.8859		18.5494		15.3995		10.5419	10.5419	MG/KG	168	N	138	N	19		75 - 125	20	MS
Nickel	60	10.5735		32.5532		27.1980		10.5419	10.5419	MG/KG	208	N	158	N	18		75 - 125	20	MS
Phosphorus		377.4340		479.5151		497.3400		105.4185	104.3950	MG/KG	97		115		4		75 - 125	20	P
Potassium		2330.7339		3392.4689		3465.6947		1054.1851	1043.9503	MG/KG	101		109		2		75 - 125	20	P
Selenium	78	0.1716	B	3.5210		2.7746		2.1084	2.1084	MG/KG	159	N	123		24	*	75 - 125	20	MS
Silver	107	0.0372	B	17.2971		14.6300		10.5419	10.5419	MG/KG	164	N	138	N	17		75 - 125	20	MS
Sodium		306.0006		1331.3704		1347.8662		1054.1851	1043.9503	MG/KG	97		100		1		75 - 125	20	P
Strontium		29.5521		134.5688		136.6844		105.4185	104.3950	MG/KG	100		103		2		75 - 115	20	P
Thallium	203	0.2439		0.9935		0.8501		0.4217	0.4217	MG/KG	178	N	144	N	16		75 - 125	20	MS
Tin		2.3113	B	386.9914		381.6087		421.6740	417.5801	MG/KG	91		91		1		80 - 110	20	P
Titanium		890.7196		1039.0312		1152.7226		105.4185	107.5269	MG/KG	141		244		10			20	P
Vanadium	51	38.6886		69.4497		56.9260		10.5419	10.5419	MG/KG	292	N	173	N	20		75 - 125	20	MS
Zinc	66	56.6519		94.7712		80.0759		10.5419	10.5419	MG/KG	362		222		17			20	MS
Zirconium		2.6579	B	105.1360		102.9377		105.4185	104.3950	MG/KG	97		96		2		75 - 125	20	P

Page 2 of 2

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

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

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE200
Matrix: SOIL Level (low/med): LOW

5xRL

Background Lab Sample ID: 6345448BKG
% Solids for Duplicate: 92.9
Batch ID(s): P20708A, P19926B, P19908C, P19911C
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6345451DUP
% Solids for Sample: 93.0

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			12955.0827		12136.7142		7		P
Antimony	121	0.2	0.2555		0.1545	B	49		MS
Arsenic	75		6.2872		5.3304		16		MS
Barium	137		83.1963		78.1501		6		MS
Beryllium	9		1.0837		0.6775		46	*	MS
Boron			2.1380	B	1.8227	B	16		P
Cadmium	111	0.1	0.1162		0.1588		31		MS
Calcium			4724.0985		4259.1577		10		P
Chromium	52		15.1254		13.1350		14		MS
Cobalt	59		7.0947		7.2826		3		MS
Copper	63		12.0831		11.9052		1		MS
Iron			19452.1881		17953.7887		8		P
Lead	208		8.6802		8.8089		1		MS
Lithium		2.1	9.4363		8.6201		9		P
Magnesium			4224.0537		3902.3319		8		P
Manganese			163.8282		139.4529		16		P
Mercury			0.6466		1.1201		54	*	CV
Molybdenum	98		0.8859		0.9283		5		MS
Nickel	60		10.5735		9.2473		13		MS
Phosphorus			377.4340		367.3688		3		P
Potassium			2330.7339		2084.7143		11		P
Selenium	78		0.1716	B	0.1544	B	11		MS
Silver	107		0.0372	B	0.0344	B	8		MS
Sodium		104.4	306.0006		292.1727		5		P
Strontium			29.5521		26.8332		10		P
Thallium	203	0.1	0.2439		0.2140		13		MS
Tin			2.3113	B	2.2791	B	1		P
Titanium			890.7196		799.7798		11		P
Vanadium	51		38.6886		33.4482		15		MS
Zinc	66		56.6519		54.6612		4		MS
Zirconium			2.6579	B	3.2374	B	20		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE200 6678

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE201

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-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3050B	6010B	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3050B	6020	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3060A	7199	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3550B	8015M	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3550B	8081A	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3550B	8082	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3550B	8151A	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3550B	8270C	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	3550B	8270C SIM	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	METHOD	300.0	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	METHOD	314.0	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	METHOD	7471A	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	METHOD	8015B	III
13-Jul-2011	SL-058-SA6-SS-0.0-0.5	6346976	N	METHOD	8015M	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3050B	6010B	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3050B	6020	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3060A	7199	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3550B	8015B	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3550B	8015M	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3550B	8081A	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3550B	8082	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3550B	8151A	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3550B	8270C	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	3550B	8270C SIM	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	METHOD	300.0	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	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
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	METHOD	7471A	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	METHOD	8015B	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5	6346975	N	METHOD	8015M	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5DUP	P346975D272135B	DUP	METHOD	314.0	III
13-Jul-2011	SL-056-SA6-SS-0.0-0.5MS	P346975R272158B	MS	METHOD	314.0	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3050B	6010B	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3050B	6020	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3060A	7199	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3550B	8015B	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3550B	8015M	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3550B	8081A	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3550B	8082	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3550B	8151A	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3550B	8270C	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	3550B	8270C SIM	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	METHOD	300.0	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	METHOD	314.0	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	METHOD	7471A	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	METHOD	8015B	III
14-Jul-2011	SL-043-SA6-SS-0.0-0.5	6346964	N	METHOD	8015M	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3050B	6010B	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3050B	6020	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3060A	7199	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3550B	8015B	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3550B	8015M	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	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
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3550B	8082	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3550B	8151A	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3550B	8270C	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	3550B	8270C SIM	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	METHOD	300.0	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	METHOD	314.0	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	METHOD	7471A	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	METHOD	8015B	III
14-Jul-2011	SL-044-SA6-SS-0.0-0.5	6346965	N	METHOD	8015M	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3050B	6010B	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3050B	6020	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3060A	7199	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3550B	8015M	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3550B	8081A	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3550B	8082	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3550B	8151A	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3550B	8270C	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	3550B	8270C SIM	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	METHOD	300.0	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	METHOD	314.0	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	METHOD	7471A	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	METHOD	8015B	III
14-Jul-2011	SL-302-SA6-SS-0.0-0.5	6346967	N	METHOD	8015M	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3050B	6010B	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3050B	6020	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	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
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3550B	8015B	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3550B	8015M	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3550B	8081A	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3550B	8082	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3550B	8151A	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3550B	8270C	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	3550B	8270C SIM	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	METHOD	300.0	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	METHOD	314.0	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	METHOD	7471A	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	METHOD	8015B	III
14-Jul-2011	SL-303-SA6-SS-0.0-0.5	6346968	N	METHOD	8015M	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3050B	6010B	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3050B	6020	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3060A	7199	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3550B	8015B	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3550B	8015M	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3550B	8081A	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3550B	8082	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3550B	8151A	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3550B	8270C	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	3550B	8270C SIM	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	METHOD	300.0	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	METHOD	314.0	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	METHOD	7471A	III
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-304-SA6-SS-0.0-0.5	6346969	N	METHOD	8015M	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	3050B	6010B	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	3050B	6020	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	3060A	7199	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	3550B	8081A	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	3550B	8082	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	3550B	8151A	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	3550B	8270C	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	3550B	8270C SIM	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	METHOD	300.0	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	METHOD	314.0	III
14-Jul-2011	SL-005-SA6-SS-0.0-0.5	6346961	N	METHOD	7471A	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	3050B	6010B	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	3050B	6020	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	3060A	7199	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	3550B	8081A	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	3550B	8082	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	3550B	8151A	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	3550B	8270C	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	3550B	8270C SIM	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	METHOD	300.0	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	METHOD	314.0	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5	6346960	N	METHOD	7471A	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5DUP	P346960D271829A	DUP	METHOD	300.0	III
14-Jul-2011	SL-004-SA6-SS-0.0-0.5MS	P346960R271843A	MS	METHOD	300.0	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	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
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	3050B	6020	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	3060A	7199	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	3550B	8081A	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	3550B	8082	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	3550B	8151A	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	3550B	8270C	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	3550B	8270C SIM	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	METHOD	300.0	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	METHOD	314.0	III
14-Jul-2011	SL-020-SA6-SS-0.0-0.5	6346962	N	METHOD	7471A	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	3050B	6010B	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	3050B	6020	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	3060A	7199	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	3550B	8081A	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	3550B	8082	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	3550B	8151A	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	3550B	8270C	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	3550B	8270C SIM	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	METHOD	300.0	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	METHOD	314.0	III
14-Jul-2011	SL-029-SA6-SS-0.0-0.5	6346963	N	METHOD	7471A	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3050B	6010B	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3050B	6020	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3060A	7199	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3550B	8015B	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	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
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3550B	8081A	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3550B	8082	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3550B	8151A	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3550B	8270C	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	3550B	8270C SIM	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	METHOD	300.0	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	METHOD	314.0	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	METHOD	6850	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	METHOD	7471A	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	METHOD	8015B	III
14-Jul-2011	SL-126-SA6-SS-0.0-0.5	6346966	N	METHOD	8015M	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3050B	6010B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3050B	6020	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3060A	7199	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3550B	8015B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3550B	8015M	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3550B	8081A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3550B	8082	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3550B	8151A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3550B	8270C	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	3550B	8270C SIM	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	METHOD	300.0	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	METHOD	314.0	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	METHOD	7471A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	METHOD	8015B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5	6346970	N	METHOD	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3050B	6010B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3050B	6020	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3060A	7199	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3550B	8015B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3550B	8015M	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3550B	8081A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3550B	8082	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3550B	8151A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3550B	8270C	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	3550B	8270C SIM	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	METHOD	300.0	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	METHOD	314.0	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	METHOD	7471A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	METHOD	8015B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MS	6346971	MS	METHOD	8015M	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3050B	6010B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3050B	6020	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3550B	8015B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3550B	8015M	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3550B	8081A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3550B	8082	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3550B	8151A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3550B	8270C	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	3550B	8270C SIM	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	METHOD	7471A	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Jul-2011	SL-286-SA6-SS-0.0-0.5MSD	6346972	MSD	METHOD	8015M	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5DUP	6346973	DUP	3050B	6010B	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5DUP	6346973	DUP	3050B	6020	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5DUP	6346973	DUP	3060A	7199	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5DUP	6346973	DUP	METHOD	300.0	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5DUP	6346973	DUP	METHOD	314.0	III
14-Jul-2011	SL-286-SA6-SS-0.0-0.5DUP	6346973	DUP	METHOD	7471A	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3050B	6010B	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3050B	6020	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3060A	7199	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3550B	8015B	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3550B	8015M	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3550B	8081A	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3550B	8082	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3550B	8151A	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3550B	8270C	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	3550B	8270C SIM	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	METHOD	300.0	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	METHOD	314.0	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	METHOD	7471A	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	METHOD	8015B	III
14-Jul-2011	DUP03-SA6-QC-071511	6346974	FD	METHOD	8015M	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: PrepDE201_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.684	J	0.363	MDL	5.04	PQL	mg/Kg	J	Z
SODIUM	69.9	J	6.00	MDL	101	PQL	mg/Kg	J	Z
TIN	2.52	J	0.323	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.08	J	0.464	MDL	5.04	PQL	mg/Kg	U	B, B

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.545	J	0.351	MDL	4.87	PQL	mg/Kg	J	Z
TIN	2.88	J	0.312	MDL	9.74	PQL	mg/Kg	U	B
Zirconium	2.49	J	0.448	MDL	4.87	PQL	mg/Kg	U	B, B

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.01	J	0.361	MDL	5.02	PQL	mg/Kg	J	Z
SODIUM	68.3	J	5.97	MDL	100	PQL	mg/Kg	J	Z
TIN	5.50	J	0.321	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	0.882	J	0.462	MDL	5.02	PQL	mg/Kg	U	B, B

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.87	J	0.369	MDL	5.12	PQL	mg/Kg	J	Z
SODIUM	91.0	J	6.09	MDL	102	PQL	mg/Kg	J	Z
TIN	3.18	J	0.328	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.72	J	0.471	MDL	5.12	PQL	mg/Kg	U	B, B

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.851	J	0.362	MDL	5.03	PQL	mg/Kg	J	Z
SODIUM	65.8	J	5.98	MDL	101	PQL	mg/Kg	J	Z
TIN	2.74	J	0.322	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.80	J	0.462	MDL	5.03	PQL	mg/Kg	U	B, B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-043-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 7:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.855	J	0.373	MDL	5.18	PQL	mg/Kg	J	Z
TIN	2.30	J	0.332	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.24	J	0.477	MDL	5.18	PQL	mg/Kg	U	B, B

Sample ID: SL-044-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.805	J	0.357	MDL	4.95	PQL	mg/Kg	J	Z
SODIUM	91.0	J	5.89	MDL	99.1	PQL	mg/Kg	J	Z
TIN	2.65	J	0.317	MDL	9.91	PQL	mg/Kg	U	B
Zirconium	1.60	J	0.456	MDL	4.95	PQL	mg/Kg	U	B, B

Sample ID: SL-056-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.07	J	0.356	MDL	4.95	PQL	mg/Kg	J	Z
SODIUM	61.4	J	5.89	MDL	98.9	PQL	mg/Kg	J	Z
TIN	2.85	J	0.317	MDL	9.89	PQL	mg/Kg	U	B
Zirconium	1.89	J	0.455	MDL	4.95	PQL	mg/Kg	U	B, B

Sample ID: SL-058-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.534	J	0.350	MDL	4.85	PQL	mg/Kg	J	Z
SODIUM	60.1	J	5.78	MDL	97.1	PQL	mg/Kg	J	Z
TIN	2.84	J	0.311	MDL	9.71	PQL	mg/Kg	U	B
Zirconium	1.75	J	0.447	MDL	4.85	PQL	mg/Kg	U	B, B

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.729	J	0.353	MDL	4.90	PQL	mg/Kg	J	Z
SODIUM	87.7	J	5.83	MDL	98.0	PQL	mg/Kg	J	Z
TIN	2.53	J	0.314	MDL	9.80	PQL	mg/Kg	U	B
Zirconium	1.95	J	0.451	MDL	4.90	PQL	mg/Kg	U	B, B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
BORON	0.860	J	0.363	MDL	5.04	PQL	mg/Kg	J	Z
SODIUM	63.9	J	6.00	MDL	101	PQL	mg/Kg	J	Z
TIN	2.55	J	0.323	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.464	MDL	5.04	PQL	mg/Kg	U	B, B

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.716	J	0.367	MDL	5.10	PQL	mg/Kg	J	Z
SODIUM	68.4	J	6.07	MDL	102	PQL	mg/Kg	J	Z
TIN	2.66	J	0.327	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	0.955	J	0.470	MDL	5.10	PQL	mg/Kg	U	B, B

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.41	J	0.372	MDL	5.17	PQL	mg/Kg	J	Z
SODIUM	81.0	J	6.15	MDL	103	PQL	mg/Kg	J	Z
TIN	3.16	J	0.331	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	0.888	J	0.475	MDL	5.17	PQL	mg/Kg	U	B, B

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.53	J	0.369	MDL	5.12	PQL	mg/Kg	J	Z
SODIUM	74.1	J	6.10	MDL	102	PQL	mg/Kg	J	Z
TIN	2.76	J	0.328	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.30	J	0.471	MDL	5.12	PQL	mg/Kg	U	B, B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0573	MDL	0.395	PQL	mg/Kg	J	Z, E

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.854		0.0494	MDL	0.0988	PQL	mg/Kg	J	Q, E, E

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.105	MDL	0.395	PQL	mg/Kg	J	E, E

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0731	MDL	0.198	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.02		0.0791	MDL	0.395	PQL	mg/Kg	J	E, E
BERYLLIUM	0.649		0.0158	MDL	0.0988	PQL	mg/Kg	J	Q, E
CADMIUM	0.227		0.0435	MDL	0.0988	PQL	mg/Kg	J	Q, E
CHROMIUM	20.1		0.119	MDL	0.395	PQL	mg/Kg	J	Q, Q, E, E
COBALT	8.70		0.0198	MDL	0.0988	PQL	mg/Kg	J	E, E
COPPER	11.2		0.0791	MDL	0.395	PQL	mg/Kg	J	Q, Q, E, E
LEAD	16.8		0.0101	MDL	0.198	PQL	mg/Kg	J	E
NICKEL	13.8		0.0988	MDL	0.395	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0695	J	0.0140	MDL	0.0988	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.305		0.0297	MDL	0.0988	PQL	mg/Kg	J	Q, E
VANADIUM	40.4		0.0217	MDL	0.0988	PQL	mg/Kg	J	Q, Q, E, E
ZINC	81.5		0.554	MDL	2.97	PQL	mg/Kg	J	E

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	206		0.0251	MDL	0.492	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
SELENIUM	0.137	J	0.0571	MDL	0.393	PQL	mg/Kg	J	Z, E

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
MOLYBDENUM	1.25		0.0492	MDL	0.0984	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.104	MDL	0.393	PQL	mg/Kg	J	E, E

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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	0.369		0.0728	MDL	0.197	PQL	mg/Kg	J	Q, E
ARSENIC	6.80		0.0787	MDL	0.393	PQL	mg/Kg	J	E, E
BERYLLIUM	0.961		0.0157	MDL	0.0984	PQL	mg/Kg	J	Q, E
CADMIUM	0.728		0.0433	MDL	0.0984	PQL	mg/Kg	J	Q, E
CHROMIUM	23.3		0.118	MDL	0.393	PQL	mg/Kg	J	Q, Q, E, E
COBALT	6.86		0.0197	MDL	0.0984	PQL	mg/Kg	J	E, E
COPPER	12.8		0.0787	MDL	0.393	PQL	mg/Kg	J	Q, Q, E, E
NICKEL	14.4		0.0984	MDL	0.393	PQL	mg/Kg	J	Q, Q, E
SILVER	0.600		0.0140	MDL	0.0984	PQL	mg/Kg	J	Q, E
THALLIUM	0.345		0.0295	MDL	0.0984	PQL	mg/Kg	J	Q, E
VANADIUM	45.4		0.0216	MDL	0.0984	PQL	mg/Kg	J	Q, Q, E, E
ZINC	176		0.551	MDL	2.95	PQL	mg/Kg	J	E

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	66.7		0.0254	MDL	0.497	PQL	mg/Kg	J	E
ZINC	226		1.39	MDL	7.46	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0577	MDL	0.398	PQL	mg/Kg	J	Z, E

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.14		0.0497	MDL	0.0994	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.105	MDL	0.398	PQL	mg/Kg	J	E, E

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.268		0.0736	MDL	0.199	PQL	mg/Kg	J	Q, E
ARSENIC	5.54		0.0795	MDL	0.398	PQL	mg/Kg	J	E, E
BERYLLIUM	0.601		0.0159	MDL	0.0994	PQL	mg/Kg	J	Q, E
CADMIUM	0.974		0.0437	MDL	0.0994	PQL	mg/Kg	J	Q, E
CHROMIUM	30.9		0.119	MDL	0.398	PQL	mg/Kg	J	Q, Q, E, E
COBALT	6.98		0.0199	MDL	0.0994	PQL	mg/Kg	J	E, E
COPPER	21.2		0.0795	MDL	0.398	PQL	mg/Kg	J	Q, Q, E, E
NICKEL	18.9		0.0994	MDL	0.398	PQL	mg/Kg	J	Q, Q, E
SILVER	0.309		0.0141	MDL	0.0994	PQL	mg/Kg	J	Q, E
THALLIUM	0.333		0.0298	MDL	0.0994	PQL	mg/Kg	J	Q, E
VANADIUM	41.7		0.0219	MDL	0.0994	PQL	mg/Kg	J	Q, Q, E, E

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	90.8		0.0259	MDL	0.507	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: PrepDE201_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* REA2 *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	687		2.84	MDL	15.2	PQL	mg/Kg	J	E

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0588	MDL	0.406	PQL	mg/Kg	J	Z, E

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.50		0.0507	MDL	0.101	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	98.9		0.107	MDL	0.406	PQL	mg/Kg	J	E, E

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.507		0.0750	MDL	0.203	PQL	mg/Kg	J	Q, E
ARSENIC	4.12		0.0811	MDL	0.406	PQL	mg/Kg	J	E, E
BERYLLIUM	0.611		0.0162	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	1.46		0.0446	MDL	0.101	PQL	mg/Kg	J	Q, E
CHROMIUM	59.1		0.122	MDL	0.406	PQL	mg/Kg	J	Q, Q, E, E
COBALT	5.42		0.0203	MDL	0.101	PQL	mg/Kg	J	E, E
COPPER	46.2		0.0811	MDL	0.406	PQL	mg/Kg	J	Q, Q, E, E
NICKEL	16.9		0.101	MDL	0.406	PQL	mg/Kg	J	Q, Q, E
SILVER	0.149		0.0144	MDL	0.101	PQL	mg/Kg	J	Q, E
THALLIUM	0.243		0.0304	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	30.3		0.0223	MDL	0.101	PQL	mg/Kg	J	Q, Q, E, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.285	J	0.0577	MDL	0.398	PQL	mg/Kg	J	Z, E

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.986		0.0498	MDL	0.0995	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	167		0.106	MDL	0.398	PQL	mg/Kg	J	E, E

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.247		0.0737	MDL	0.199	PQL	mg/Kg	J	Q, E
ARSENIC	5.81		0.0796	MDL	0.398	PQL	mg/Kg	J	E, E
BERYLLIUM	0.729		0.0159	MDL	0.0995	PQL	mg/Kg	J	Q, E
CADMIUM	0.397		0.0438	MDL	0.0995	PQL	mg/Kg	J	Q, E
CHROMIUM	24.4		0.119	MDL	0.398	PQL	mg/Kg	J	Q, Q, E, E
COBALT	7.91		0.0199	MDL	0.0995	PQL	mg/Kg	J	E, E
COPPER	15.3		0.0796	MDL	0.398	PQL	mg/Kg	J	Q, Q, E, E
LEAD	56.7		0.0102	MDL	0.199	PQL	mg/Kg	J	E
NICKEL	17.9		0.0995	MDL	0.398	PQL	mg/Kg	J	Q, Q, E
SILVER	0.163		0.0141	MDL	0.0995	PQL	mg/Kg	J	Q, E
THALLIUM	0.399		0.0299	MDL	0.0995	PQL	mg/Kg	J	Q, E
VANADIUM	46.4		0.0219	MDL	0.0995	PQL	mg/Kg	J	Q, Q, E, E
ZINC	136		0.557	MDL	2.99	PQL	mg/Kg	J	E

Sample ID: SL-043-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 7:41:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0595	MDL	0.411	PQL	mg/Kg	J	Z, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-043-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 7:41:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.570		0.0513	MDL	0.103	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-043-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 7:41:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	117		0.109	MDL	0.411	PQL	mg/Kg	J	E, E

Sample ID: SL-043-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 7:41:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.102	J	0.0760	MDL	0.205	PQL	mg/Kg	J	Z, Q, E
ARSENIC	4.29		0.0821	MDL	0.411	PQL	mg/Kg	J	E, E
BERYLLIUM	0.532		0.0164	MDL	0.103	PQL	mg/Kg	J	Q, E
CADMIUM	0.343		0.0452	MDL	0.103	PQL	mg/Kg	J	Q, E
CHROMIUM	18.0		0.123	MDL	0.411	PQL	mg/Kg	J	Q, Q, E, E
COBALT	6.11		0.0205	MDL	0.103	PQL	mg/Kg	J	E, E
COPPER	12.5		0.0821	MDL	0.411	PQL	mg/Kg	J	Q, Q, E, E
LEAD	22.2		0.0105	MDL	0.205	PQL	mg/Kg	J	E
NICKEL	11.8		0.103	MDL	0.411	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0580	J	0.0146	MDL	0.103	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.276		0.0308	MDL	0.103	PQL	mg/Kg	J	Q, E
VANADIUM	35.0		0.0226	MDL	0.103	PQL	mg/Kg	J	Q, Q, E, E
ZINC	75.3		0.575	MDL	3.08	PQL	mg/Kg	J	E

Sample ID: SL-044-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0569	MDL	0.392	PQL	mg/Kg	J	Z, E

Sample ID: SL-044-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.951		0.0491	MDL	0.0981	PQL	mg/Kg	J	Q, E, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-044-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:00:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	115		0.104	MDL	0.392	PQL	mg/Kg	J	E, E

Sample ID: SL-044-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0726	MDL	0.196	PQL	mg/Kg	J	Z, Q, E
ARSENIC	4.65		0.0785	MDL	0.392	PQL	mg/Kg	J	E, E
BERYLLIUM	0.534		0.0157	MDL	0.0981	PQL	mg/Kg	J	Q, E
CADMIUM	0.423		0.0432	MDL	0.0981	PQL	mg/Kg	J	Q, E
CHROMIUM	19.5		0.118	MDL	0.392	PQL	mg/Kg	J	Q, Q, E, E
COBALT	6.86		0.0196	MDL	0.0981	PQL	mg/Kg	J	E, E
COPPER	15.7		0.0785	MDL	0.392	PQL	mg/Kg	J	Q, Q, E, E
LEAD	11.5		0.0100	MDL	0.196	PQL	mg/Kg	J	E
NICKEL	12.1		0.0981	MDL	0.392	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0371	J	0.0139	MDL	0.0981	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.249		0.0294	MDL	0.0981	PQL	mg/Kg	J	Q, E
VANADIUM	41.2		0.0216	MDL	0.0981	PQL	mg/Kg	J	Q, Q, E, E
ZINC	105		0.549	MDL	2.94	PQL	mg/Kg	J	E

Sample ID: SL-056-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 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
SELENIUM	0.179	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z, E

Sample ID: SL-056-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 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
MOLYBDENUM	0.871		0.0495	MDL	0.0989	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-056-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 3:22:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	143		0.105	MDL	0.396	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-056-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 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	0.184	J	0.0732	MDL	0.198	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.82		0.0792	MDL	0.396	PQL	mg/Kg	J	E, E
BERYLLIUM	0.776		0.0158	MDL	0.0989	PQL	mg/Kg	J	Q, E
CADMIUM	0.320		0.0435	MDL	0.0989	PQL	mg/Kg	J	Q, E
CHROMIUM	25.0		0.119	MDL	0.396	PQL	mg/Kg	J	Q, Q, E, E
COBALT	8.08		0.0198	MDL	0.0989	PQL	mg/Kg	J	E, E
COPPER	12.1		0.0792	MDL	0.396	PQL	mg/Kg	J	Q, Q, E, E
LEAD	16.6		0.0101	MDL	0.198	PQL	mg/Kg	J	E
NICKEL	17.5		0.0989	MDL	0.396	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0606	J	0.0140	MDL	0.0989	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.398		0.0297	MDL	0.0989	PQL	mg/Kg	J	Q, E
VANADIUM	47.9		0.0218	MDL	0.0989	PQL	mg/Kg	J	Q, Q, E, E
ZINC	102		0.554	MDL	2.97	PQL	mg/Kg	J	E

Sample ID: SL-058-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:02:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.285	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z, E

Sample ID: SL-058-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:02:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.698		0.0495	MDL	0.0990	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-058-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:02:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	88.7		0.105	MDL	0.396	PQL	mg/Kg	J	E, E

Sample ID: SL-058-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:02:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.166	J	0.0733	MDL	0.198	PQL	mg/Kg	J	Z, Q, E
ARSENIC	9.82		0.0792	MDL	0.396	PQL	mg/Kg	J	E, E
BERYLLIUM	0.783		0.0158	MDL	0.0990	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-058-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:02:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.266		0.0436	MDL	0.0990	PQL	mg/Kg	J	Q, E
CHROMIUM	19.9		0.119	MDL	0.396	PQL	mg/Kg	J	Q, Q, E, E
COBALT	6.70		0.0198	MDL	0.0990	PQL	mg/Kg	J	E, E
COPPER	10.3		0.0792	MDL	0.396	PQL	mg/Kg	J	Q, Q, E, E
LEAD	12.1		0.0101	MDL	0.198	PQL	mg/Kg	J	E
NICKEL	13.7		0.0990	MDL	0.396	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0525	J	0.0141	MDL	0.0990	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.384		0.0297	MDL	0.0990	PQL	mg/Kg	J	Q, E
VANADIUM	38.0		0.0218	MDL	0.0990	PQL	mg/Kg	J	Q, Q, E, E
ZINC	90.1		0.554	MDL	2.97	PQL	mg/Kg	J	E

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0568	MDL	0.392	PQL	mg/Kg	J	Z, E

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.958		0.0490	MDL	0.0980	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.104	MDL	0.392	PQL	mg/Kg	J	E, E

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.224		0.0725	MDL	0.196	PQL	mg/Kg	J	Q, E
ARSENIC	6.40		0.0784	MDL	0.392	PQL	mg/Kg	J	E, E
BERYLLIUM	0.669		0.0157	MDL	0.0980	PQL	mg/Kg	J	Q, E
CADMIUM	0.240		0.0431	MDL	0.0980	PQL	mg/Kg	J	Q, E
CHROMIUM	25.5		0.118	MDL	0.392	PQL	mg/Kg	J	Q, Q, E, E
COBALT	7.56		0.0196	MDL	0.0980	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	12.7		0.0784	MDL	0.392	PQL	mg/Kg	J	Q, Q, E, E
LEAD	49.5		0.010	MDL	0.196	PQL	mg/Kg	J	E
NICKEL	18.8		0.0980	MDL	0.392	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0610	J	0.0139	MDL	0.0980	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.270		0.0294	MDL	0.0980	PQL	mg/Kg	J	Q, E
VANADIUM	42.9		0.0216	MDL	0.0980	PQL	mg/Kg	J	Q, Q, E, E
ZINC	97.0		0.549	MDL	2.94	PQL	mg/Kg	J	E

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.178		0.0435	MDL	0.0989	PQL	mg/Kg	J	Q, E

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z, E

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.705		0.0495	MDL	0.0989	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.4		0.105	MDL	0.396	PQL	mg/Kg	J	E, E

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.179	J	0.0732	MDL	0.198	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.23		0.0791	MDL	0.396	PQL	mg/Kg	J	E, E
BERYLLIUM	0.638		0.0158	MDL	0.0989	PQL	mg/Kg	J	Q, E
CHROMIUM	19.3		0.119	MDL	0.396	PQL	mg/Kg	J	Q, Q, E, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: PrepDE201_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.90		0.0198	MDL	0.0989	PQL	mg/Kg	J	E, E
COPPER	10.7		0.0791	MDL	0.396	PQL	mg/Kg	J	Q, Q, E, E
LEAD	16.9		0.0101	MDL	0.198	PQL	mg/Kg	J	E
NICKEL	13.4		0.0989	MDL	0.396	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0739	J	0.0140	MDL	0.0989	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.316		0.0297	MDL	0.0989	PQL	mg/Kg	J	Q, E
VANADIUM	38.7		0.0218	MDL	0.0989	PQL	mg/Kg	J	Q, Q, E, E
ZINC	80.4		0.554	MDL	2.97	PQL	mg/Kg	J	E

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0581	MDL	0.400	PQL	mg/Kg	J	Z, E

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.588		0.0500	MDL	0.100	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	74.9		0.106	MDL	0.400	PQL	mg/Kg	J	E, E

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.109	J	0.0741	MDL	0.200	PQL	mg/Kg	J	Z, Q, E
ARSENIC	2.97		0.0801	MDL	0.400	PQL	mg/Kg	J	E, E
BERYLLIUM	0.384		0.0160	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.777		0.0440	MDL	0.100	PQL	mg/Kg	J	Q, E
CHROMIUM	10.6		0.120	MDL	0.400	PQL	mg/Kg	J	Q, Q, E, E
COBALT	3.92		0.0200	MDL	0.100	PQL	mg/Kg	J	E, E
COPPER	9.40		0.0801	MDL	0.400	PQL	mg/Kg	J	Q, Q, E, E
LEAD	40.3		0.0102	MDL	0.200	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: PrepDE201_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	7.47		0.100	MDL	0.400	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0349	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.226		0.0300	MDL	0.100	PQL	mg/Kg	J	Q, E
VANADIUM	23.0		0.0220	MDL	0.100	PQL	mg/Kg	J	Q, Q, E, E
ZINC	140		0.561	MDL	3.00	PQL	mg/Kg	J	E

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:55:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	160		1.43	MDL	7.67	PQL	mg/Kg	J	E

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
SELENIUM	0.215	J	0.0593	MDL	0.409	PQL	mg/Kg	J	Z, E

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
MOLYBDENUM	0.944		0.0511	MDL	0.102	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:55:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.108	MDL	0.409	PQL	mg/Kg	J	E, E

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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	0.205		0.0757	MDL	0.205	PQL	mg/Kg	J	Q, E
ARSENIC	4.52		0.0818	MDL	0.409	PQL	mg/Kg	J	E, E
BERYLLIUM	0.635		0.0164	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	1.43		0.0450	MDL	0.102	PQL	mg/Kg	J	Q, E
CHROMIUM	17.7		0.123	MDL	0.409	PQL	mg/Kg	J	Q, Q, E, E
COBALT	5.86		0.0205	MDL	0.102	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
COPPER	11.5		0.0818	MDL	0.409	PQL	mg/Kg	J	Q, Q, E, E
LEAD	44.1		0.0104	MDL	0.205	PQL	mg/Kg	J	E
NICKEL	13.4		0.102	MDL	0.409	PQL	mg/Kg	J	Q, Q, E
SILVER	0.197		0.0145	MDL	0.102	PQL	mg/Kg	J	Q, E
THALLIUM	0.301		0.0307	MDL	0.102	PQL	mg/Kg	J	Q, E
VANADIUM	33.8		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, Q, E, E

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0583	MDL	0.402	PQL	mg/Kg	J	Z, E

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.665		0.0503	MDL	0.101	PQL	mg/Kg	J	Q, E, E

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.107	MDL	0.402	PQL	mg/Kg	J	E, E

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.161	J	0.0744	MDL	0.201	PQL	mg/Kg	J	Z, Q, E
ARSENIC	3.59		0.0804	MDL	0.402	PQL	mg/Kg	J	E, E
BERYLLIUM	0.528		0.0161	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	0.574		0.0442	MDL	0.101	PQL	mg/Kg	J	Q, E
CHROMIUM	14.8		0.121	MDL	0.402	PQL	mg/Kg	J	Q, Q, E, E
COBALT	4.81		0.0201	MDL	0.101	PQL	mg/Kg	J	E, E
COPPER	9.28		0.0804	MDL	0.402	PQL	mg/Kg	J	Q, Q, E, E
LEAD	27.5		0.0103	MDL	0.201	PQL	mg/Kg	J	E
NICKEL	10.9		0.101	MDL	0.402	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0670	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: PrepDE201_v2 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.287		0.0302	MDL	0.101	PQL	mg/Kg	J	Q, E
VANADIUM	28.3		0.0221	MDL	0.101	PQL	mg/Kg	J	Q, Q, E, E
ZINC	135		0.563	MDL	3.02	PQL	mg/Kg	J	E

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

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.66	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.95	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.75	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.93	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: PrepDE201_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 Matrix: SO

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
HEXAVALENT CHROMIUM	0.66	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0339	J	0.0068	MDL	0.0970	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0840	J	0.0071	MDL	0.100	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0412	J	0.0070	MDL	0.0996	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0172	J	0.0070	MDL	0.0991	PQL	mg/Kg	J	Z

Sample ID: SL-043-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 7:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0201	J	0.0073	MDL	0.104	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-044-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0374	J	0.0069	MDL	0.0979	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0103	J	0.0070	MDL	0.0996	PQL	mg/Kg	J	Z

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
MERCURY	0.0314	J	0.0067	MDL	0.0957	PQL	mg/Kg	J	Z

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0194	J	0.0070	MDL	0.0994	PQL	mg/Kg	J	Z

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0263	J	0.0070	MDL	0.0993	PQL	mg/Kg	J	Z

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0275	J	0.0070	MDL	0.0999	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.3	J	2.0	MDL	6.0	PQL	mg/Kg	J	Z
EFH (C21-C30)	23		2.0	MDL	6.0	PQL	mg/Kg	J	FD

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	84		2.0	MDL	6.0	PQL	mg/Kg	J	FD
EFH (C8-C11)	2.0	U	2.0	MDL	6.0	PQL	mg/Kg	UJ	FD

Sample ID: SL-056-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:22:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.48	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.3	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.8		0.40	MDL	1.2	PQL	mg/Kg	J	Q
EFH (C21-C30)	11		0.40	MDL	1.2	PQL	mg/Kg	J	FD
EFH (C30-C40)	31		0.40	MDL	1.2	PQL	mg/Kg	J	FD
EFH (C8-C11)	0.44	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
DIETHYLENE GLYCOL	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q
Propylene glycol	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.2	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *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	4.8		0.33	MDL	1.7	PQL	ug/Kg	J	L

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	6.8		0.81	MDL	3.4	PQL	ug/Kg	J	S

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* DL2-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	6.5		0.68	MDL	3.5	PQL	ug/Kg	J	L
Chlordane	18	J	8.2	MDL	35	PQL	ug/Kg	J	Z

Sample ID: SL-043-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 7:41:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.096	J	0.069	MDL	0.35	PQL	ug/Kg	J	Z, L
DELTA-BHC	0.040	J	0.037	MDL	0.17	PQL	ug/Kg	J	Z, L
ENDRIN ALDEHYDE	0.21	J	0.069	MDL	0.35	PQL	ug/Kg	J	Z
MIREX	0.27	J	0.069	MDL	0.35	PQL	ug/Kg	J	Z

Sample ID: SL-044-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.044	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-056-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:22:00 *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'-DDE	0.67	U	0.67	MDL	3.4	PQL	ug/Kg	UJ	H
4,4'-DDT	19		0.67	MDL	3.4	PQL	ug/Kg	J	H
DIELDRIN	3.3	J	0.67	MDL	3.4	PQL	ug/Kg	J	Z, H

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-056-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 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'-DDD	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	H
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	UJ	H
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	H
BETA-BHC	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	H
Chlordane	0.81	U	0.81	MDL	3.4	PQL	ug/Kg	UJ	H
DELTA-BHC	0.037	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z, H
ENDOSULFAN I	0.044	U	0.044	MDL	0.17	PQL	ug/Kg	UJ	H
ENDOSULFAN II	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	H
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	H
ENDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	H
ENDRIN ALDEHYDE	2.2	U	2.2	MDL	2.2	PQL	ug/Kg	UJ	H
ENDRIN KETONE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	H
gamma-BHC (Lindane)	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	H
HEPTACHLOR	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	H
HEPTACHLOR EPOXIDE	0.71		0.034	MDL	0.17	PQL	ug/Kg	J	H
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	H
MIREX	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	H
TOXAPHENE	2.2	U	2.2	MDL	6.7	PQL	ug/Kg	UJ	H

Sample ID: SL-058-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 3:02:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.043	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z, S

Sample ID: SL-126-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 2:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.1	J	0.80	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-286-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 2:54:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	R	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.3	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z, S

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.2		0.068	MDL	0.35	PQL	ug/Kg	J	L, S
Chlordane	3.3	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z, S

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	15		0.33	MDL	1.7	PQL	ug/Kg	J	FD
AROCLOR 1260	7.2		0.39	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* RES *Dilution:* 200

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	430	J	210	MDL	680	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	7.6	J	5.1	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-044-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.1	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *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	29		1.7	MDL	8.6	PQL	ug/Kg	J	FD
AROCLOR 1260	2.0	U	2.0	MDL	8.6	PQL	ug/Kg	UJ	FD

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	4.4	J	2.0	MDL	8.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *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	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-004-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.085	J	0.076	MDL	0.17	PQL	ug/Kg	J	Z
2,4-DB	0.64	J	0.63	MDL	1.7	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *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	0.085	MDL	0.18	PQL	ug/Kg	J	Z
2,4-D	2.7	J	1.2	MDL	3.7	PQL	ug/Kg	J	Z
2,4-DB	1.0	J	0.64	MDL	1.8	PQL	ug/Kg	J	Z
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	150	J	77	MDL	260	PQL	ug/Kg	U	B

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *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	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L
MCPP	91	J	76	MDL	250	PQL	ug/Kg	U	B

Sample ID: SL-043-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 7:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.3	J	0.65	MDL	1.8	PQL	ug/Kg	J	Z
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-044-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-056-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 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
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-058-SA6-SS-0.0-0.5 *Collected:* 7/13/2011 3:02:00 *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	0.99	J	0.63	MDL	1.7	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-126-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.080	J	0.075	MDL	0.17	PQL	ug/Kg	J	Z
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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
DICHLOROPROP	0.81	U	0.81	MDL	1.7	PQL	ug/Kg	R	Q
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *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	0.27	U	0.27	MDL	0.27	PQL	ug/Kg	UJ	S
2,4,5-TP (Silvex)	0.077	U	0.077	MDL	0.18	PQL	ug/Kg	UJ	S
2,4-D	5.2	U	5.2	MDL	5.2	PQL	ug/Kg	UJ	S
2,4-DB	5.8	U	5.8	MDL	5.8	PQL	ug/Kg	UJ	S
DALAPON	4.5	U	4.5	MDL	9.3	PQL	ug/Kg	UJ	S
DICAMBA	0.41	U	0.41	MDL	1.2	PQL	ug/Kg	UJ	S
DICHLOROPROP	0.82	U	0.82	MDL	1.8	PQL	ug/Kg	UJ	S
DINOSEB	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L
MCPA	78	U	78	MDL	260	PQL	ug/Kg	UJ	S
MCPP	1500		77	MDL	260	PQL	ug/Kg	J	S

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 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	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.77	J	0.41	MDL	1.2	PQL	ug/Kg	J	Z
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	17	MDL	340	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP03-SA6-QC-071511 *Collected:* 7/14/2011 2:59:00 *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	20	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	31	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-005-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	88	J	85	MDL	850	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	280	J	85	MDL	850	PQL	ug/Kg	J	Z
CHRYSENE	170	J	85	MDL	850	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	110	J	85	MDL	850	PQL	ug/Kg	J	Z

Sample ID: SL-020-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 12:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	51	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	39	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	85	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	38	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	33	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	17	MDL	340	PQL	ug/Kg	J	Z
CHRYSENE	110	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	98	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	29	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	46	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	88	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 1:26:00 *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	18	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	17	MDL	340	PQL	ug/Kg	J	Z
FLUORANTHENE	23	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	21	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-056-SA6-SS-0.0-0.5 ***Collected:*** 7/13/2011 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	22	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-126-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 2:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-286-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 2:54:00 ***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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	Q
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	R	Q
BENZO(B)FLUORANTHENE	19	J	17	MDL	170	PQL	ug/Kg	J	Z
CHRYSENE	19	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	35	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	30	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-302-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 8:28:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	34	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-303-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 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
CHRYSENE	23	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	31	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-304-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 9:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	17	MDL	350	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP03-SA6-QC-071511 ***Collected:*** 7/14/2011 2:59:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.2	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, FD
ANTHRACENE	2.3		0.34	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(A)ANTHRACENE	9.1		0.67	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	8.0		0.67	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	8.9		0.67	MDL	1.7	PQL	ug/Kg	J	FD
Butylbenzylphthalate	8.2	J	6.0	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.95	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.3	J	6.0	MDL	18	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	0.68	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, FD

Sample ID: SL-004-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 11:16:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.94	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.3	J	6.1	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	0.43	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.1	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-005-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 10:50:00 ***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(K)FLUORANTHENE	77	J	34	MDL	85	PQL	ug/Kg	J	Z

Sample ID: SL-020-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 12:57:00 ***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	5.7	J	1.7	MDL	8.6	PQL	ug/Kg	J	Z
NAPHTHALENE	3.5	J	3.4	MDL	8.6	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA6-SS-0.0-0.5 ***Collected:*** 7/14/2011 1:26:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	6.1	J	6.1	MDL	18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-044-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 8:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.2	J	6.1	MDL	18	PQL	ug/Kg	J	Z

Sample ID: **SL-056-SA6-SS-0.0-0.5** ***Collected:*** **7/13/2011 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	0.99	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.1	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	6.1	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-058-SA6-SS-0.0-0.5** ***Collected:*** **7/13/2011 3:02:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.65	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.4	J	6.1	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.82	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-126-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 2:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.9	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: **SL-286-SA6-SS-0.0-0.5** ***Collected:*** **7/14/2011 2:54:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.57	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, FD
ANTHRACENE	1.0	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	4.6		0.67	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	4.5		0.67	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	4.5		0.67	MDL	1.7	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.3	J	6.1	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.90	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	18	J	6.1	MDL	18	PQL	ug/Kg	J	FD

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: PrepDE201_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.67	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD

Sample ID: SL-302-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.87	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	13	J	6.2	MDL	19	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.4	J	6.2	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.87	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.3	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.2	MDL	19	PQL	ug/Kg	J	Z
FLUORENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.81	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.48	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.99	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	11	J	6.2	MDL	19	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.9	J	6.2	MDL	19	PQL	ug/Kg	J	Z
FLUORENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.83	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-286-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 2:54:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	UJ	Q

Sample ID: SL-303-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 8:55:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	R	S
O-TERPHENYL	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	R	S
p-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	R	S

Sample ID: SL-304-SA6-SS-0.0-0.5 *Collected:* 7/14/2011 9:14:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	S
p-Terphenyl	1.5	U	1.5	MDL	3.6	PQL	mg/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: PrepDE201_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE201

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE201 **Laboratory: LL**
EDD Filename: DE201_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8081A **Preparation Method: 3550B**
Matrix: SO

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
SL-056-SA6-SS-0.0-0.5 (RES)	Sampling To Extraction	16.00	14.00	DAYS	J (all detects)
SL-056-SA6-SS-0.0-0.5 (DL)		16.00	14.00	DAYS	UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. .eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20008BB220316	7/26/2011 3:16:00 AM	CALCIUM	9.33 mg/Kg	DUP03-SA6-QC-071511
		IRON	5.79 mg/Kg	SL-004-SA6-SS-0.0-0.5
		MAGNESIUM	0.469 mg/Kg	SL-005-SA6-SS-0.0-0.5
		MANGANESE	0.0430 mg/Kg	SL-020-SA6-SS-0.0-0.5
		PHOSPHORUS	1.76 mg/Kg	SL-029-SA6-SS-0.0-0.5
		STRONTIUM	0.0290 mg/Kg	SL-043-SA6-SS-0.0-0.5
		TIN	1.84 mg/Kg	SL-044-SA6-SS-0.0-0.5
		Zirconium	0.568 mg/Kg	SL-056-SA6-SS-0.0-0.5
				SL-058-SA6-SS-0.0-0.5
				SL-126-SA6-SS-0.0-0.5
				SL-286-SA6-SS-0.0-0.5
				SL-302-SA6-SS-0.0-0.5
				SL-303-SA6-SS-0.0-0.5
				SL-304-SA6-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-SA6-QC-071511(RES)	TIN	2.52 mg/Kg	2.52U mg/Kg
DUP03-SA6-QC-071511(RES)	Zirconium	2.08 mg/Kg	2.08U mg/Kg
SL-004-SA6-SS-0.0-0.5(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-004-SA6-SS-0.0-0.5(RES)	Zirconium	2.49 mg/Kg	2.49U mg/Kg
SL-005-SA6-SS-0.0-0.5(RES)	TIN	5.50 mg/Kg	5.50U mg/Kg
SL-005-SA6-SS-0.0-0.5(RES)	Zirconium	0.882 mg/Kg	0.882U mg/Kg
SL-020-SA6-SS-0.0-0.5(RES)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-020-SA6-SS-0.0-0.5(RES)	Zirconium	1.72 mg/Kg	1.72U mg/Kg
SL-029-SA6-SS-0.0-0.5(RES)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-029-SA6-SS-0.0-0.5(RES)	Zirconium	1.80 mg/Kg	1.80U mg/Kg
SL-043-SA6-SS-0.0-0.5(RES)	TIN	2.30 mg/Kg	2.30U mg/Kg
SL-043-SA6-SS-0.0-0.5(RES)	Zirconium	2.24 mg/Kg	2.24U mg/Kg
SL-044-SA6-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-044-SA6-SS-0.0-0.5(RES)	Zirconium	1.60 mg/Kg	1.60U mg/Kg
SL-056-SA6-SS-0.0-0.5(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-056-SA6-SS-0.0-0.5(RES)	Zirconium	1.89 mg/Kg	1.89U mg/Kg
SL-058-SA6-SS-0.0-0.5(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-058-SA6-SS-0.0-0.5(RES)	Zirconium	1.75 mg/Kg	1.75U mg/Kg
SL-126-SA6-SS-0.0-0.5(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-126-SA6-SS-0.0-0.5(RES)	Zirconium	1.95 mg/Kg	1.95U mg/Kg
SL-286-SA6-SS-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-286-SA6-SS-0.0-0.5(RES)	Zirconium	2.48 mg/Kg	2.48U mg/Kg
SL-302-SA6-SS-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-302-SA6-SS-0.0-0.5(RES)	Zirconium	0.955 mg/Kg	0.955U mg/Kg
SL-303-SA6-SS-0.0-0.5(RES)	TIN	3.16 mg/Kg	3.16U mg/Kg
SL-303-SA6-SS-0.0-0.5(RES)	Zirconium	0.888 mg/Kg	0.888U mg/Kg
SL-304-SA6-SS-0.0-0.5(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-304-SA6-SS-0.0-0.5(RES)	Zirconium	1.30 mg/Kg	1.30U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02029AB321945A	7/27/2011 7:45:00 PM	EFH (C21-C30) EFH (C30-C40)	0.41 mg/Kg 1.0 mg/Kg	DUP03-SA6-QC-071511 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-056-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P06062AB241611A	7/27/2011 4:11:00 PM	MCPP	150 ug/Kg	DUP03-SA6-QC-071511 SL-004-SA6-SS-0.0-0.5 SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-056-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-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-020-SA6-SS-0.0-0.5(RES)	MCPP	150 ug/Kg	260U ug/Kg
SL-029-SA6-SS-0.0-0.5(RES)	MCPP	91 ug/Kg	250U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-286-SA6-SS-0.0-0.5MS SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	15 41 55	25 51 -	59.00-109.00 63.00-107.00 63.00-107.00	46 (20.00) 22 (20.00) -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)
SL-286-SA6-SS-0.0-0.5MS SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	129 - 244 -	127 142 180 243	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	- - - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J(all detects) EFH (C21-C30) and EFH (C30-C40), No Qual, >4x

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-286-SA6-SS-0.0-0.5MS SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	4,4'-DDE 4,4'-DDT DIELDRIN	218 - 181	211 223 -	18.00-161.00 10.00-176.00 19.00-154.00	- - -	4,4'-DDE 4,4'-DDT DIELDRIN	J(all detects) 4,4'-DDT, No Qual, >4x
SL-286-SA6-SS-0.0-0.5MS SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	ENDRIN	0	0	11.00-149.00	-	ENDRIN	J(all detects) R(all non-detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	AROCLOR 1260	-	195	39.00-149.00	-	AROCLOR 1260	No Qual, Diluted Out

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	DICHLOROPROP	-	0	33.00-178.00	200 (50.00)	DICHLOROPROP	J(all detects) R(all non-detects)
SL-286-SA6-SS-0.0-0.5MS (SL-286-SA6-SS-0.0-0.5)	DINOSEB	8	-	10.00-46.00	-	DINOSEB	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-286-SA6-SS-0.0-0.5MS (SL-286-SA6-SS-0.0-0.5)	m-Terphenyl	72	-	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **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-286-SA6-SS-0.0-0.5MS	ARSENIC	9	133	75.00-125.00	25 (20.00)	ARSENIC	
SL-286-SA6-SS-0.0-0.5MSD	LEAD	-31	141	75.00-125.00	28 (20.00)	LEAD	
(DUP03-SA6-QC-071511	ZINC	-78	126	75.00-125.00	24 (20.00)	ZINC	
SL-004-SA6-SS-0.0-0.5							
SL-005-SA6-SS-0.0-0.5							J(all detects)
SL-020-SA6-SS-0.0-0.5							UJ(all non-detects)
SL-029-SA6-SS-0.0-0.5							
SL-043-SA6-SS-0.0-0.5							
SL-044-SA6-SS-0.0-0.5							
SL-056-SA6-SS-0.0-0.5							
SL-058-SA6-SS-0.0-0.5							
SL-126-SA6-SS-0.0-0.5							No Qual, %R, >4x
SL-286-SA6-SS-0.0-0.5							
SL-302-SA6-SS-0.0-0.5							
SL-303-SA6-SS-0.0-0.5							
SL-304-SA6-SS-0.0-0.5)							
SL-286-SA6-SS-0.0-0.5MS	ANTIMONY	30	52	75.00-125.00	38 (20.00)	ANTIMONY	
SL-286-SA6-SS-0.0-0.5MSD	BERYLLIUM	-	133	75.00-125.00	29 (20.00)	BERYLLIUM	
(DUP03-SA6-QC-071511	CADMIUM	-	141	75.00-125.00	29 (20.00)	CADMIUM	
SL-004-SA6-SS-0.0-0.5	CHROMIUM	63	130	75.00-125.00	23 (20.00)	CHROMIUM	
SL-005-SA6-SS-0.0-0.5	COBALT	-	-	75.00-125.00	23 (20.00)	COBALT	
SL-020-SA6-SS-0.0-0.5	COPPER	73	137	75.00-125.00	30 (20.00)	COPPER	
SL-029-SA6-SS-0.0-0.5	NICKEL	71	137	75.00-125.00	27 (20.00)	NICKEL	
SL-043-SA6-SS-0.0-0.5	SILVER	-	129	75.00-125.00	21 (20.00)	SILVER	J(all detects)
SL-044-SA6-SS-0.0-0.5	THALLIUM	-	126	75.00-125.00	27 (20.00)	THALLIUM	UJ(all non-detects)
SL-056-SA6-SS-0.0-0.5	VANADIUM	30	155	75.00-125.00	26 (20.00)	VANADIUM	
SL-058-SA6-SS-0.0-0.5							
SL-126-SA6-SS-0.0-0.5							
SL-286-SA6-SS-0.0-0.5							
SL-302-SA6-SS-0.0-0.5							
SL-303-SA6-SS-0.0-0.5							
SL-304-SA6-SS-0.0-0.5)							
SL-286-SA6-SS-0.0-0.5MSD	SELENIUM	-	-	75.00-125.00	21 (20.00)	SELENIUM	
(DUP03-SA6-QC-071511							
SL-004-SA6-SS-0.0-0.5							
SL-005-SA6-SS-0.0-0.5							
SL-020-SA6-SS-0.0-0.5							
SL-029-SA6-SS-0.0-0.5							
SL-043-SA6-SS-0.0-0.5							
SL-044-SA6-SS-0.0-0.5							J(all detects)
SL-056-SA6-SS-0.0-0.5							UJ(all non-detects)
SL-058-SA6-SS-0.0-0.5							
SL-126-SA6-SS-0.0-0.5							
SL-286-SA6-SS-0.0-0.5							
SL-302-SA6-SS-0.0-0.5							
SL-303-SA6-SS-0.0-0.5							
SL-304-SA6-SS-0.0-0.5)							
SL-286-SA6-SS-0.0-0.5MSD	MOLYBDENUM	-	130	75.00-125.00	24 (20.00)	MOLYBDENUM	
(DUP03-SA6-QC-071511							
SL-004-SA6-SS-0.0-0.5							
SL-005-SA6-SS-0.0-0.5							
SL-020-SA6-SS-0.0-0.5							
SL-029-SA6-SS-0.0-0.5							
SL-043-SA6-SS-0.0-0.5							
SL-044-SA6-SS-0.0-0.5							J(all detects)
SL-056-SA6-SS-0.0-0.5							UJ(all non-detects)
SL-058-SA6-SS-0.0-0.5							
SL-126-SA6-SS-0.0-0.5							
SL-286-SA6-SS-0.0-0.5							
SL-302-SA6-SS-0.0-0.5							
SL-303-SA6-SS-0.0-0.5							
SL-304-SA6-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **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-286-SA6-SS-0.0-0.5MS SL-286-SA6-SS-0.0-0.5MSD (DUP03-SA6-QC-071511 SL-004-SA6-SS-0.0-0.5 SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-056-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5)	BARIUM	-121	167	75.00-125.00	29 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual, %R, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-286-SA6-SS-0.0-0.5MS	ALUMINUM	1588	1175	75.00-125.00	-	ALUMINUM	
SL-286-SA6-SS-0.0-0.5MSD	CALCIUM	142	259	75.00-125.00	-	CALCIUM	
(DUP03-SA6-QC-071511	MAGNESIUM	154	-	75.00-125.00	-	MAGNESIUM	
SL-004-SA6-SS-0.0-0.5	TITANIUM	250	173	75.00-125.00	-	TITANIUM	
SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-056-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5)							No Qual, >4x
SL-286-SA6-SS-0.0-0.5MS SL-286-SA6-SS-0.0-0.5MSD (DUP03-SA6-QC-071511 SL-004-SA6-SS-0.0-0.5 SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-056-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5)	IRON	1128	-1071	75.00-125.00	-	IRON	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. 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-286-SA6-SS-0.0-0.5MS (DUP03-SA6-QC-071511 SL-004-SA6-SS-0.0-0.5 SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-056-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5)	MANGANESE	59	-	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
SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	BENZOIC ACID	-	-	10.00-173.00	54 (30.00)	BENZOIC ACID	J(all detects)
SL-286-SA6-SS-0.0-0.5MS SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)
SL-286-SA6-SS-0.0-0.5MS SL-286-SA6-SS-0.0-0.5MSD (SL-286-SA6-SS-0.0-0.5)	2,4-DINITROPHENOL	15	-	20.00-143.00	55 (30.00)	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-286-SA6-SS-0.0-0.5DUP	BORON	22	20.00	
(DUP03-SA6-QC-071511	Zirconium	22	20.00	
SL -004-SA6-SS-0.0-0.5				
SL -005-SA6-SS-0.0-0.5				
SL -020-SA6-SS-0.0-0.5				
SL -029-SA6-SS-0.0-0.5				
SL -043-SA6-SS-0.0-0.5				
SL -044-SA6-SS-0.0-0.5				No Qual,
SL -056-SA6-SS-0.0-0.5				OK by Difference
SL -058-SA6-SS-0.0-0.5				
SL -126-SA6-SS-0.0-0.5				
SL -286-SA6-SS-0.0-0.5				
SL -302-SA6-SS-0.0-0.5				
SL -303-SA6-SS-0.0-0.5				
SL -304-SA6-SS-0.0-0.5)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-286-SA6-SS-0.0-0.5DUP	ANTIMONY	22	20.00	
(DUP03-SA6-QC-071511	ARSENIC	23	20.00	
SL -004-SA6-SS-0.0-0.5	BARIUM	22	20.00	J(all detects)
SL -005-SA6-SS-0.0-0.5	CADMIUM	34	20.00	UJ(all non-detects)
SL -020-SA6-SS-0.0-0.5	CHROMIUM	32	20.00	
SL -029-SA6-SS-0.0-0.5	COBALT	23	20.00	
SL -043-SA6-SS-0.0-0.5	COPPER	21	20.00	Sb, Cd, Se,
SL -044-SA6-SS-0.0-0.5	MOLYBDENUM	24	20.00	No Qual,
SL -056-SA6-SS-0.0-0.5	SELENIUM	24	20.00	OK by Difference
SL -058-SA6-SS-0.0-0.5	VANADIUM	21	20.00	
SL -126-SA6-SS-0.0-0.5				
SL -286-SA6-SS-0.0-0.5				
SL -302-SA6-SS-0.0-0.5				
SL -303-SA6-SS-0.0-0.5				
SL -304-SA6-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. eQAPP Name: CDM_SSFL_110509

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-286-SA6-SS-0.0-0.5DUP (DUP03-SA6-QC-071511 SL-004-SA6-SS-0.0-0.5 SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-056-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5)	MERCURY	30	20.00	No Qual, OK by Difference

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-004-SA6-SS-0.0-0.5DUP (SL-004-SA6-SS-0.0-0.5 SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5)	FLUORIDE	43	20.00	No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. 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
P11992AQ320759A (SL-043-SA6-SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	145 143 133	- - -	75.00-125.00 65.00-122.00 75.00-125.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12047AQ240106A (DUP03-SA6-QC-071511 SL-004-SA6-SS-0.0-0.5 SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5)	4,4'-DDE DELTA-BHC	149 147	- -	59.00-141.00 55.00-144.00	- -	4,4'-DDE DELTA-BHC	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12062AQ241638A (DUP03-SA6-QC-071511 SL-004-SA6-SS-0.0-0.5 SL-005-SA6-SS-0.0-0.5 SL-020-SA6-SS-0.0-0.5 SL-029-SA6-SS-0.0-0.5 SL-043-SA6-SS-0.0-0.5 SL-044-SA6-SS-0.0-0.5 SL-056-SA6-SS-0.0-0.5 SL-058-SA6-SS-0.0-0.5 SL-126-SA6-SS-0.0-0.5 SL-286-SA6-SS-0.0-0.5 SL-302-SA6-SS-0.0-0.5 SL-303-SA6-SS-0.0-0.5 SL-304-SA6-SS-0.0-0.5)	DINOSEB	4	-	10.00-36.00	-	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
P12105AQ240107A (SL-056-SA6-SS-0.0-0.5)	ENDOSULFAN II	128	-	63.00-127.00	-	ENDOSULFAN II	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. 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
P20026AQ221005A	CHROMIUM	122	-	80.00-120.00	-	CHROMIUM	
(DUP03-SA6-QC-071511	VANADIUM	124	-	80.00-120.00	-	VANADIUM	
SL-004-SA6-SS-0.0-0.5							
SL-005-SA6-SS-0.0-0.5							
SL-020-SA6-SS-0.0-0.5							
SL-029-SA6-SS-0.0-0.5							
SL-043-SA6-SS-0.0-0.5							
SL-044-SA6-SS-0.0-0.5							No Qual, SRM within QC Limits
SL-056-SA6-SS-0.0-0.5							
SL-058-SA6-SS-0.0-0.5							
SL-126-SA6-SS-0.0-0.5							
SL-286-SA6-SS-0.0-0.5							
SL-302-SA6-SS-0.0-0.5							
SL-303-SA6-SS-0.0-0.5							
SL-304-SA6-SS-0.0-0.5)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20008BQ220320	ALUMINUM	132	-	80.00-120.00	-	ALUMINUM	
(DUP03-SA6-QC-071511	IRON	129	-	80.00-120.00	-	IRON	
SL-004-SA6-SS-0.0-0.5	TITANIUM	157	-	80.00-120.00	-	TITANIUM	
SL-005-SA6-SS-0.0-0.5							
SL-020-SA6-SS-0.0-0.5							
SL-029-SA6-SS-0.0-0.5							
SL-043-SA6-SS-0.0-0.5							
SL-044-SA6-SS-0.0-0.5							No Qual, SRM within QC Limits
SL-056-SA6-SS-0.0-0.5							
SL-058-SA6-SS-0.0-0.5							
SL-126-SA6-SS-0.0-0.5							
SL-286-SA6-SS-0.0-0.5							
SL-302-SA6-SS-0.0-0.5							
SL-303-SA6-SS-0.0-0.5							
SL-304-SA6-SS-0.0-0.5)							

Surrogate Outlier Report

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP03-SA6-QC-071511	ACETONE	140	42.00-138.00	All Target Analytes	J (all detects)
SL-303-SA6-SS-0.0-0.5	n-Triacontane-d62	0	50.00-150.00	All Target Analytes	J(all detects) R(all non-detects)
SL-304-SA6-SS-0.0-0.5	n-Triacontane-d62	27	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-005-SA6-SS-0.0-0.5	DECACHLOROBIPHENYL	241	20.00-120.00	All Target Analytes	J(all detects)
SL-020-SA6-SS-0.0-0.5	DECACHLOROBIPHENYL	304	20.00-120.00	All Target Analytes	J(all detects)
SL-058-SA6-SS-0.0-0.5	DECACHLOROBIPHENYL	207	20.00-120.00	All Target Analytes	J(all detects)
SL-286-SA6-SS-0.0-0.5	DECACHLOROBIPHENYL	150	20.00-120.00	All Target Analytes	J(all detects)
SL-302-SA6-SS-0.0-0.5	DECACHLOROBIPHENYL	127	20.00-120.00	All Target Analytes	J(all detects)
SL-304-SA6-SS-0.0-0.5	DECACHLOROBIPHENYL	124	20.00-120.00	All Target Analytes	J(all detects)

Method: 8151A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-302-SA6-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	19	36.00-156.00	All Target Analytes	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
MOISTURE	0.88	0.81	8		No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
ALUMINUM	12600	14300	13	50.00	No Qualifiers Applied
BORON	0.860	0.684	23	50.00	
CALCIUM	2360	2690	13	50.00	
IRON	19400	21000	8	50.00	
LITHIUM	21.7	24.8	13	50.00	
MAGNESIUM	4140	4570	10	50.00	
MANGANESE	267	271	1	50.00	
PHOSPHORUS	322	385	18	50.00	
POTASSIUM	2750	3060	11	50.00	
SODIUM	63.9	69.9	9	50.00	
STRONTIUM	12.5	14.2	13	50.00	
TIN	2.55	2.52	1	50.00	
TITANIUM	963	1080	11	50.00	
Zirconium	2.48	2.08	18	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
ANTIMONY	0.179	0.180	1	50.00	No Qualifiers Applied
ARSENIC	8.23	8.02	3	50.00	
BARIUM	97.4	101	4	50.00	
BERYLLIUM	0.638	0.649	2	50.00	
CADMIUM	0.178	0.227	24	50.00	
CHROMIUM	19.3	20.1	4	50.00	
COBALT	6.90	8.70	23	50.00	
COPPER	10.7	11.2	5	50.00	
LEAD	16.9	16.8	1	50.00	
MOLYBDENUM	0.705	0.854	19	50.00	
NICKEL	13.4	13.8	3	50.00	
SELENIUM	0.126	0.134	6	50.00	
SILVER	0.0739	0.0695	6	50.00	
THALLIUM	0.316	0.305	4	50.00	
VANADIUM	38.7	40.4	4	50.00	
ZINC	80.4	81.5	1	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
HEXAVALENT CHROMIUM	0.66	0.66	0	50.00	No Qualifiers Applied

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

Field Duplicate RPD Report

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. eQAPP Name: CDM_SSFL_110509

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
MERCURY	0.0314	0.0339	8	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
EFH (C15-C20)	1.8	2.3	24	50.00	No Qualifiers Applied
EFH (C21-C30)	11	23	71	50.00	J(all detects) UJ(all non-detects)
EFH (C30-C40)	31	84	92	50.00	
EFH (C8-C11)	0.44	6.0 U	200	50.00	

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
4,4'-DDT	4.1	3.9	5	50.00	No Qualifiers Applied

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
Aroclor 5460	33	24	32	50.00	No Qualifiers Applied
AROCLOR 1254	29	15	64	50.00	J(all detects) UJ(all non-detects)
AROCLOR 1260	8.6 U	7.2	200	50:00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
BENZO(G,H,I)PERYLENE	4.0	2.9	32	50.00	No Qualifiers Applied
Butylbenzylphthalate	7.3	8.2	12	50.00	
DIBENZO(A,H)ANTHRACENE	0.90	0.95	5	50.00	
INDENO(1,2,3-CD)PYRENE	3.1	3.0	3	50.00	
PHENANTHRENE	5.1	7.8	42	50.00	
ACENAPHTHYLENE	0.57	1.2	71	50.00	J(all detects) UJ(all non-detects)
ANTHRACENE	1.0	2.3	79	50.00	
BENZO(A)ANTHRACENE	4.6	9.1	66	50.00	
BENZO(A)PYRENE	4.5	8.0	56	50.00	
BENZO(K)FLUORANTHENE	4.5	8.9	66	50.00	
Di-n-butylphthalate	18	8.3	74	50.00	
NAPHTHALENE	1.7 U	0.68	200	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
CHRYSENE	19	20	5	50.00	No Qualifiers Applied
PYRENE	30	31	3	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-286-SA6-SS-0.0-0.5	DUP03-SA6-QC-071511			
PH	7.01	6.95	1	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA6-QC-071511	BORON	J	0.684	5.04	PQL	mg/Kg	J (all detects)
	SODIUM	J	69.9	101	PQL	mg/Kg	
	TIN	J	2.52	10.1	PQL	mg/Kg	
	Zirconium	J	2.08	5.04	PQL	mg/Kg	
SL-004-SA6-SS-0.0-0.5	BORON	J	0.545	4.87	PQL	mg/Kg	J (all detects)
	TIN	J	2.88	9.74	PQL	mg/Kg	
	Zirconium	J	2.49	4.87	PQL	mg/Kg	
SL-005-SA6-SS-0.0-0.5	BORON	J	1.01	5.02	PQL	mg/Kg	J (all detects)
	SODIUM	J	68.3	100	PQL	mg/Kg	
	TIN	J	5.50	10.0	PQL	mg/Kg	
	Zirconium	J	0.882	5.02	PQL	mg/Kg	
SL-020-SA6-SS-0.0-0.5	BORON	J	1.87	5.12	PQL	mg/Kg	J (all detects)
	SODIUM	J	91.0	102	PQL	mg/Kg	
	TIN	J	3.18	10.2	PQL	mg/Kg	
	Zirconium	J	1.72	5.12	PQL	mg/Kg	
SL-029-SA6-SS-0.0-0.5	BORON	J	0.851	5.03	PQL	mg/Kg	J (all detects)
	SODIUM	J	65.8	101	PQL	mg/Kg	
	TIN	J	2.74	10.1	PQL	mg/Kg	
	Zirconium	J	1.80	5.03	PQL	mg/Kg	
SL-043-SA6-SS-0.0-0.5	BORON	J	0.855	5.18	PQL	mg/Kg	J (all detects)
	TIN	J	2.30	10.4	PQL	mg/Kg	
	Zirconium	J	2.24	5.18	PQL	mg/Kg	
SL-044-SA6-SS-0.0-0.5	BORON	J	0.805	4.95	PQL	mg/Kg	J (all detects)
	SODIUM	J	91.0	99.1	PQL	mg/Kg	
	TIN	J	2.65	9.91	PQL	mg/Kg	
	Zirconium	J	1.60	4.95	PQL	mg/Kg	
SL-056-SA6-SS-0.0-0.5	BORON	J	1.07	4.95	PQL	mg/Kg	J (all detects)
	SODIUM	J	61.4	98.9	PQL	mg/Kg	
	TIN	J	2.85	9.89	PQL	mg/Kg	
	Zirconium	J	1.89	4.95	PQL	mg/Kg	
SL-058-SA6-SS-0.0-0.5	BORON	J	0.534	4.85	PQL	mg/Kg	J (all detects)
	SODIUM	J	60.1	97.1	PQL	mg/Kg	
	TIN	J	2.84	9.71	PQL	mg/Kg	
	Zirconium	J	1.75	4.85	PQL	mg/Kg	
SL-126-SA6-SS-0.0-0.5	BORON	J	0.729	4.90	PQL	mg/Kg	J (all detects)
	SODIUM	J	87.7	98.0	PQL	mg/Kg	
	TIN	J	2.53	9.80	PQL	mg/Kg	
	Zirconium	J	1.95	4.90	PQL	mg/Kg	
SL-286-SA6-SS-0.0-0.5	BORON	J	0.860	5.04	PQL	mg/Kg	J (all detects)
	SODIUM	J	63.9	101	PQL	mg/Kg	
	TIN	J	2.55	10.1	PQL	mg/Kg	
	Zirconium	J	2.48	5.04	PQL	mg/Kg	
SL-302-SA6-SS-0.0-0.5	BORON	J	0.716	5.10	PQL	mg/Kg	J (all detects)
	SODIUM	J	68.4	102	PQL	mg/Kg	
	TIN	J	2.66	10.2	PQL	mg/Kg	
	Zirconium	J	0.955	5.10	PQL	mg/Kg	
SL-303-SA6-SS-0.0-0.5	BORON	J	1.41	5.17	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.0	103	PQL	mg/Kg	
	TIN	J	3.16	10.3	PQL	mg/Kg	
	Zirconium	J	0.888	5.17	PQL	mg/Kg	
SL-304-SA6-SS-0.0-0.5	BORON	J	1.53	5.12	PQL	mg/Kg	J (all detects)
	SODIUM	J	74.1	102	PQL	mg/Kg	
	TIN	J	2.76	10.2	PQL	mg/Kg	
	Zirconium	J	1.30	5.12	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA6-QC-071511	ANTIMONY	J	0.180	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.134	0.395	PQL	mg/Kg	
	SILVER	J	0.0695	0.0988	PQL	mg/Kg	
SL-004-SA6-SS-0.0-0.5	SELENIUM	J	0.137	0.393	PQL	mg/Kg	J (all detects)
SL-005-SA6-SS-0.0-0.5	SELENIUM	J	0.157	0.398	PQL	mg/Kg	J (all detects)
SL-020-SA6-SS-0.0-0.5	SELENIUM	J	0.157	0.406	PQL	mg/Kg	J (all detects)
SL-029-SA6-SS-0.0-0.5	SELENIUM	J	0.285	0.398	PQL	mg/Kg	J (all detects)
SL-043-SA6-SS-0.0-0.5	ANTIMONY	J	0.102	0.205	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.108	0.411	PQL	mg/Kg	
	SILVER	J	0.0580	0.103	PQL	mg/Kg	
SL-044-SA6-SS-0.0-0.5	ANTIMONY	J	0.167	0.196	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.142	0.392	PQL	mg/Kg	
	SILVER	J	0.0371	0.0981	PQL	mg/Kg	
SL-056-SA6-SS-0.0-0.5	ANTIMONY	J	0.184	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.179	0.396	PQL	mg/Kg	
	SILVER	J	0.0606	0.0989	PQL	mg/Kg	
SL-058-SA6-SS-0.0-0.5	ANTIMONY	J	0.166	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.285	0.396	PQL	mg/Kg	
	SILVER	J	0.0525	0.0990	PQL	mg/Kg	
SL-126-SA6-SS-0.0-0.5	SELENIUM	J	0.114	0.392	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0610	0.0980	PQL	mg/Kg	
SL-286-SA6-SS-0.0-0.5	ANTIMONY	J	0.179	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.126	0.396	PQL	mg/Kg	
	SILVER	J	0.0739	0.0989	PQL	mg/Kg	
SL-302-SA6-SS-0.0-0.5	ANTIMONY	J	0.109	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.131	0.400	PQL	mg/Kg	
	SILVER	J	0.0349	0.100	PQL	mg/Kg	
SL-303-SA6-SS-0.0-0.5	SELENIUM	J	0.215	0.409	PQL	mg/Kg	J (all detects)
SL-304-SA6-SS-0.0-0.5	ANTIMONY	J	0.161	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.177	0.402	PQL	mg/Kg	
	SILVER	J	0.0670	0.101	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA6-QC-071511	HEXAVALENT CHROMIUM	J	0.66	1.0	PQL	mg/Kg	J (all detects)
SL-004-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.95	1.0	PQL	mg/Kg	J (all detects)
SL-020-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.75	1.0	PQL	mg/Kg	J (all detects)
SL-044-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.54	1.0	PQL	mg/Kg	J (all detects)
SL-126-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.93	1.0	PQL	mg/Kg	J (all detects)
SL-286-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.66	1.0	PQL	mg/Kg	J (all detects)
SL-303-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.0	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE201 Laboratory: LL

EDD Filename: DE201_v2. eQAPP Name: CDM_SSFL_110509

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA6-QC-071511	MERCURY	J	0.0339	0.0970	PQL	mg/Kg	J (all detects)
SL-004-SA6-SS-0.0-0.5	MERCURY	J	0.0840	0.100	PQL	mg/Kg	J (all detects)
SL-005-SA6-SS-0.0-0.5	MERCURY	J	0.0412	0.0996	PQL	mg/Kg	J (all detects)
SL-029-SA6-SS-0.0-0.5	MERCURY	J	0.0172	0.0991	PQL	mg/Kg	J (all detects)
SL-043-SA6-SS-0.0-0.5	MERCURY	J	0.0201	0.104	PQL	mg/Kg	J (all detects)
SL-044-SA6-SS-0.0-0.5	MERCURY	J	0.0374	0.0979	PQL	mg/Kg	J (all detects)
SL-056-SA6-SS-0.0-0.5	MERCURY	J	0.0103	0.0996	PQL	mg/Kg	J (all detects)
SL-286-SA6-SS-0.0-0.5	MERCURY	J	0.0314	0.0957	PQL	mg/Kg	J (all detects)
SL-302-SA6-SS-0.0-0.5	MERCURY	J	0.0194	0.0994	PQL	mg/Kg	J (all detects)
SL-303-SA6-SS-0.0-0.5	MERCURY	J	0.0263	0.0993	PQL	mg/Kg	J (all detects)
SL-304-SA6-SS-0.0-0.5	MERCURY	J	0.0275	0.0999	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA6-QC-071511	EFH (C15-C20)	J	2.3	6.0	PQL	mg/Kg	J (all detects)
SL-056-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.48	1.2	PQL	mg/Kg	J (all detects)
SL-126-SA6-SS-0.0-0.5	EFH (C15-C20)	J	2.3	6.1	PQL	mg/Kg	J (all detects)
SL-286-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.44	1.2	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA6-SS-0.0-0.5	Chlordane	J	2.2	3.4	PQL	ug/Kg	J (all detects)
SL-020-SA6-SS-0.0-0.5	Chlordane	J	18	35	PQL	ug/Kg	J (all detects)
SL-043-SA6-SS-0.0-0.5	4,4'-DDE DELTA-BHC ENDRIN ALDEHYDE MIREX	J J J J	0.096 0.040 0.21 0.27	0.35 0.17 0.35 0.35	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-044-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.044	0.17	PQL	ug/Kg	J (all detects)
SL-056-SA6-SS-0.0-0.5	DELTA-BHC DIELDRIN	J J	0.037 3.3	0.17 3.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-058-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.043	0.17	PQL	ug/Kg	J (all detects)
SL-126-SA6-SS-0.0-0.5	Chlordane	J	3.1	3.4	PQL	ug/Kg	J (all detects)
SL-302-SA6-SS-0.0-0.5	Chlordane	J	3.3	3.5	PQL	ug/Kg	J (all detects)
SL-304-SA6-SS-0.0-0.5	Chlordane	J	3.3	3.5	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE201 **Laboratory:** LL

EDD Filename: DE201_v2. **eQAPP Name:** CDM_SSFL_110509

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA6-SS-0.0-0.5	Aroclor 5460	J	430	680	PQL	ug/Kg	J (all detects)
SL-029-SA6-SS-0.0-0.5	Aroclor 5460	J	7.6	17	PQL	ug/Kg	J (all detects)
SL-044-SA6-SS-0.0-0.5	Aroclor 5460	J	2.1	3.4	PQL	ug/Kg	J (all detects)
SL-303-SA6-SS-0.0-0.5	AROCLOR 1260	J	4.4	8.8	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA6-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.085	0.17	PQL	ug/Kg	J (all detects)
	2,4-DB	J	0.64	1.7	PQL	ug/Kg	
SL-020-SA6-SS-0.0-0.5	2,4,5-T	J	0.15	0.18	PQL	ug/Kg	J (all detects)
	2,4-D	J	2.7	3.7	PQL	ug/Kg	
	2,4-DB	J	1.0	1.8	PQL	ug/Kg	
	MCPP	J	150	260	PQL	ug/Kg	
SL-029-SA6-SS-0.0-0.5	MCPP	J	91	250	PQL	ug/Kg	J (all detects)
SL-043-SA6-SS-0.0-0.5	2,4-DB	J	1.3	1.8	PQL	ug/Kg	J (all detects)
SL-058-SA6-SS-0.0-0.5	2,4-DB	J	0.99	1.7	PQL	ug/Kg	J (all detects)
SL-126-SA6-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.080	0.17	PQL	ug/Kg	J (all detects)
SL-304-SA6-SS-0.0-0.5	DICAMBA	J	0.77	1.2	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA6-QC-071511	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	340	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	20	170	PQL	ug/Kg	
	PYRENE	J	31	170	PQL	ug/Kg	
SL-005-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	88	850	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	280	850	PQL	ug/Kg	
	CHRYSENE	J	170	850	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	110	850	PQL	ug/Kg	
SL-020-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	51	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	39	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	85	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	38	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	33	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	340	PQL	ug/Kg	
	CHRYSENE	J	110	170	PQL	ug/Kg	
	FLUORANTHENE	J	98	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	29	170	PQL	ug/Kg	
	PHENANTHRENE	J	46	170	PQL	ug/Kg	
	PYRENE	J	88	170	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	18	170	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	340	PQL	ug/Kg	
	FLUORANTHENE	J	23	170	PQL	ug/Kg	
	PYRENE	J	21	170	PQL	ug/Kg	
SL-056-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	340	PQL	ug/Kg	J (all detects)
SL-126-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	340	PQL	ug/Kg	J (all detects)
SL-286-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	19	170	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	19	170	PQL	ug/Kg	
	FLUORANTHENE	J	35	170	PQL	ug/Kg	
	PYRENE	J	30	170	PQL	ug/Kg	
SL-302-SA6-SS-0.0-0.5	Di-n-octylphthalate	J	34	170	PQL	ug/Kg	J (all detects)
SL-303-SA6-SS-0.0-0.5	CHRYSENE	J	23	170	PQL	ug/Kg	J (all detects)
	PYRENE	J	31	170	PQL	ug/Kg	
SL-304-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	350	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA6-QC-071511	ACENAPHTHYLENE	J	1.2	1.7	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.2	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.95	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.3	18	PQL	ug/Kg	
	NAPHTHALENE	J	0.68	1.7	PQL	ug/Kg	
SL-004-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	0.94	1.7	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.3	18	PQL	ug/Kg	
	CHRYSENE	J	0.43	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	11	18	PQL	ug/Kg	
SL-005-SA6-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	77	85	PQL	ug/Kg	J (all detects)
SL-020-SA6-SS-0.0-0.5	ANTHRACENE	J	5.7	8.6	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	3.5	8.6	PQL	ug/Kg	
SL-029-SA6-SS-0.0-0.5	Butylbenzylphthalate	J	6.1	18	PQL	ug/Kg	J (all detects)
SL-044-SA6-SS-0.0-0.5	Di-n-butylphthalate	J	6.2	18	PQL	ug/Kg	J (all detects)
SL-056-SA6-SS-0.0-0.5	ANTHRACENE	J	0.99	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.0	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.1	18	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.7	PQL	ug/Kg	
SL-058-SA6-SS-0.0-0.5	ANTHRACENE	J	0.65	1.7	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.4	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.82	1.7	PQL	ug/Kg	
SL-126-SA6-SS-0.0-0.5	CHRYSENE	J	1.9	8.4	PQL	ug/Kg	J (all detects)
SL-286-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	0.57	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	18	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.3	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.90	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE201 **Laboratory: LL**

EDD Filename: DE201_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-302-SA6-SS-0.0-0.5	ACENAPHTHENE	J	0.87	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	13	19	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	7.4	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.7	PQL	ug/Kg	
SL-303-SA6-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.87	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.3	1.7	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	11	19	PQL	ug/Kg	
	FLUORENE	J	1.4	1.7	PQL	ug/Kg	
SL-304-SA6-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.81	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.48	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.5	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.99	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	11	19	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	7.9	19	PQL	ug/Kg	
	FLUORENE	J	1.5	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.83	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	

LDC #: 26407A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-21-11
SDG #: DE201 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CC
2nd Reviewer: MG

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	~~A~~	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	A	
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-004-SA6-SS-0.0-0.5	11	SL-286-SA6-SS-0.0-0.5	21		31	
2	SL-005-SA6-SS-0.0-0.5	12	DUP03-SA6-QC-071511	22		32	
3	SL-020-SA6-SS-0.0-0.5	13	SL-056-SA6-SS-0.0-0.5	23		33	
4	SL-029-SA6-SS-0.0-0.5	14	SL-058-SA6-SS-0.0-0.5	24		34	
5	SL-043-SA6-SS-0.0-0.5	15	SL-286-SA6-SS-0.0-0.5MS	25		35	
6	SL-044-SA6-SS-0.0-0.5	16	SL-286-SA6-SS-0.0-0.5MSD	26		36	
7	SL-126-SA6-SS-0.0-0.5	17	SL-286-SA6-SS-0.0-0.5DUP	27		37	
8	SL-302-SA6-SS-0.0-0.5	18		28		38	
9	SL-303-SA6-SS-0.0-0.5	19		29		39	
10	SL-304-SA6-SS-0.0-0.5	20		30		40	

Notes:

LDC #: 26407A4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: All

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Zr	7.9	3.95	2.5	0.88	1.7	1.8	2.2	1.6	1.9	0.96	0.89	1.3	2.5	2.1	1.9	1.8

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE201
Matrix: SOIL Level (low/med): LOW

74x

Background Lab Sample ID: 6346970BKG Matrix Spike Lab Sample ID: 6346971MS Matrix Spike Duplicate Lab Sample ID: 6346972MSD
% Solids for Sample: 99.1
Batch Id(s): P20008B, P20026A, P20011B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		12628.0293		15740.3799		14953.6485		195.9382	197.8592	MG/KG	1588		1175		5			20	P
Antimony	121	0.1790	B	0.5411		0.7930		1.1989	1.1872	MG/KG	30	N	52	N	38	*	75 - 125	20	MS
Arsenic	75	8.2290		8.4083		10.8585		1.9982	1.9786	MG/KG	9		133		25	*		20	MS
Barium	137	97.4654		85.4023		114.0065		9.9909	9.8930	MG/KG	-121		167		29	*		20	MS
Beryllium	9	0.6381		1.2611		1.6885		0.7993	0.7914	MG/KG	78		133	N	29	*	75 - 125	20	MS
Boron		0.8597	B	194.4687		193.2213		195.9382	197.8592	MG/KG	99		97		1		84 - 115	20	P
Cadmium	111	0.1777		1.1749		1.5746		0.9991	0.9893	MG/KG	100		141	N	29	*	75 - 125	20	MS
Calcium		2358.0525		2914.9873		3381.3953		391.8764	395.7183	MG/KG	142		259		15			20	P
Chromium	52	19.3506		25.6167		32.1719		9.9909	9.8930	MG/KG	63	N	130	N	23	*	75 - 125	20	MS
Cobalt	59	6.8974		53.5912		67.6480		49.9545	49.4648	MG/KG	93		123		23	*	75 - 125	20	MS
Copper	63	10.7279		18.0016		24.2575		9.9909	9.8930	MG/KG	73	N	137	N	30	*	75 - 125	20	MS
Iron		19385.3310		20490.5460		18325.5416		97.9691	98.9296	MG/KG	1128		-1071		11			20	P
Lead	208	16.8715		15.9375		21.0522		2.9973	2.9679	MG/KG	-31		141		28	*		20	MS
Lithium		21.7346		125.5278		123.8668		97.9691	98.9296	MG/KG	106		103		1		82 - 114	20	P
Magnesium		4137.8920		4438.8056		4319.1993		195.9382	197.8592	MG/KG	154		92		3			20	P
Manganese		267.4793		296.3418		305.8715		48.9845	49.4648	MG/KG	59		78		3			20	P
Mercury		0.0314	B	0.2105		0.2021		0.1645	0.1670	MG/KG	109		102		4		65 - 135	20	CV
Molybdenum	98	0.7054		10.7382		13.6107		9.9909	9.8930	MG/KG	100		130	N	24	*	75 - 125	20	MS
Nickel	60	13.4426		20.5213		27.0276		9.9909	9.8930	MG/KG	71	N	137	N	27	*	75 - 125	20	MS
Phosphorus		321.8759		417.9146		412.5314		97.9691	98.9296	MG/KG	98		92		1		75 - 125	20	P
Potassium		2753.9536		3872.8400		3736.8938		979.6910	989.2958	MG/KG	114		99		4		75 - 125	20	P
Selenium	78	0.1264	B	2.0561		2.5306		1.9982	1.9786	MG/KG	97		122		21	*	75 - 125	20	MS
Silver	107	0.0739	B	10.4205		12.8094		9.9909	9.8930	MG/KG	104		129	N	21	*	75 - 125	20	MS
Sodium		63.9102	B	1039.8195		1035.0616		979.6910	989.2958	MG/KG	100		98		0		75 - 125	20	P
Strontium		12.4924		111.7240		113.7354		97.9691	98.9296	MG/KG	101		102		2		75 - 115	20	P
Thallium	203	0.3158		0.6212		0.8144		0.3996	0.3957	MG/KG	76		126	N	27	*	75 - 125	20	MS
Tin		2.5540	B	352.3674		357.0903		391.8764	395.7183	MG/KG	89		90		1		80 - 110	20	P
Titanium		962.8971		1207.3516		1133.6964		97.9691	98.9296	MG/KG	250		173		6			20	P
Vanadium	51	38.7408		41.7820		54.0551		9.9909	9.8930	MG/KG	30	N	155	N	26	*	75 - 125	20	MS
Zinc	66	80.4495		72.6938		92.9344		9.9909	9.8930	MG/KG	-78		126		24	*		20	MS
Zirconium		2.4854	B	96.4731		98.3152		97.9691	98.9296	MG/KG	96		97		2		75 - 125	20	P

RPDout
RPDout
RPDout

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

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

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<5xRL

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE201
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6346970BKG
% Solids for Duplicate: 99.1
Batch ID(s): P20008B, P20026A, P20011B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6346973DUP
% Solids for Sample: 99.1

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			12628.0293		13590.6195		7		P
Antimony	121	0.2	0.1790	B	0.2222		22		MS
Arsenic	75		8.2290		10.4013		23	*	MS
Barium	137		97.4654		121.1286		22	*	MS
Beryllium	9		0.6381		0.7223		12		MS
Boron			0.8597	B	1.0777	B	23		P
Cadmium	111	0.1	0.1777		0.2511		34		MS
Calcium			2358.0525		2501.9623		6		P
Chromium	52		19.3506		26.7019		32	*	MS
Cobalt	59		6.8974		8.6897		23	*	MS
Copper	63		10.7279		13.2248		21	*	MS
Iron			19385.3310		20805.6136		7		P
Lead	208		16.8715		20.3175		19		MS
Lithium			21.7346		23.1481		6		P
Magnesium			4137.8920		4315.0059		4		P
Manganese			267.4793		257.6078		4		P
Mercury			0.0314	B	0.0423	B	30		CV
Molybdenum	98		0.7054		0.8998		24	*	MS
Nickel	60		13.4426		16.1259		18		MS
Phosphorus			321.8759		338.9398		5		P
Potassium			2753.9536		2866.6298		4		P
Selenium	78		0.1264	B	0.1607	B	24		MS
Silver	107		0.0739	B	0.0630	B	16		MS
Sodium			63.9102	B	65.2190	B	2		P
Strontium			12.4924		13.1210		5		P
Thallium	203	0.1	0.3158		0.3615		13		MS
Tin			2.5540	B	2.4492	B	4		P
Titanium			962.8971		1023.5273		6		P
Vanadium	51		38.7408		47.7373		21	*	MS
Zinc	66		80.4495		95.7851		17		MS
Zirconium			2.4854	B	2.0015	B	22		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE202

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3050B	6010B	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3050B	6020	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3060A	7199	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3550B	8015B	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3550B	8015M	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3550B	8081A	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3550B	8082	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3550B	8151A	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3550B	8270C	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	3550B	8270C SIM	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	METHOD	300.0	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	METHOD	314.0	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	METHOD	7471A	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	METHOD	8015B	III
18-Jul-2011	SL-133-SA6-SS-0.0-0.5	6348154	N	METHOD	8015M	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3050B	6010B	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3050B	6020	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3060A	7199	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3550B	8015B	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3550B	8015M	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3550B	8081A	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3550B	8082	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3550B	8151A	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3550B	8270C	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	3550B	8270C SIM	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	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
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	METHOD	314.0	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	METHOD	7471A	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	METHOD	8015B	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5	6348155	N	METHOD	8015M	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5DUP	P348155D271746A	DUP	3060A	7199	III
18-Jul-2011	SL-134-SA6-SS-0.0-0.5MS	P348155R271656A	MS	3060A	7199	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3050B	6010B	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3050B	6020	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3060A	7199	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3550B	8015B	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3550B	8015M	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3550B	8081A	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3550B	8082	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3550B	8151A	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3550B	8270C	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	3550B	8270C SIM	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	METHOD	300.0	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	METHOD	314.0	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	METHOD	7471A	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	METHOD	8015B	III
18-Jul-2011	SL-293-SA6-SS-0.0-0.5	6348169	N	METHOD	8015M	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3050B	6010B	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3050B	6020	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3060A	7199	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3550B	8015B	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	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
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3550B	8081A	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3550B	8082	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3550B	8151A	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3550B	8270C	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	3550B	8270C SIM	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	METHOD	300.0	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	METHOD	314.0	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	METHOD	7471A	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	METHOD	8015B	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5	6348153	N	METHOD	8015M	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5MSD	P348153M240218A	MSD	3550B	8081A	III
18-Jul-2011	SL-128-SA6-SS-0.0-0.5MS	P348153R240203A	MS	3550B	8081A	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3050B	6010B	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3050B	6020	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3060A	7199	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3550B	8015B	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3550B	8015M	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3550B	8081A	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3550B	8082	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3550B	8151A	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3550B	8270C	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	3550B	8270C SIM	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	METHOD	300.0	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	METHOD	314.0	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	METHOD	7471A	III
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jul-2011	SL-145-SA6-SS-0.0-0.5	6348158	N	METHOD	8015M	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3050B	6010B	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3060A	7199	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3550B	8015B	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3550B	8015M	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3550B	8081A	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3550B	8082	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3550B	8151A	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3550B	8270C	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	3550B	8270C SIM	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	METHOD	300.0	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	METHOD	314.0	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	METHOD	6850	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	METHOD	7471A	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	METHOD	8015B	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5	6348152	N	METHOD	8015M	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5DUP	P348152D220855	DUP	METHOD	7471A	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5DUP	P348152D221523A	DUP	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5DUP	P348152D221523C	DUP	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5DUP	P348152D221523D	DUP	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5DUP	P348152D222102	DUP	3050B	6010B	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5DUP	P348152D222158B	DUP	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5DUP	P348152D270010A	DUP	METHOD	300.0	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5DUP	P348152D270235A	DUP	METHOD	314.0	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M220857	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
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M221529A	MSD	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M221529C	MSD	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M221529D	MSD	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M222109	MSD	3050B	6010B	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M222202B	MSD	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M242017A	MSD	3550B	8151A	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M242042A	MSD	3550B	8082	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M261003	MSD	3550B	8270C	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M261228	MSD	3550B	8270C SIM	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MSD	P348152M320812A	MSD	3550B	8015M	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R220856	MS	METHOD	7471A	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R221526A	MS	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R221526C	MS	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R221526D	MS	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R222106	MS	3050B	6010B	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R222200B	MS	3050B	6020	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R241949A	MS	3550B	8151A	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R242024A	MS	3550B	8082	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R260938	MS	3550B	8270C	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R261156	MS	3550B	8270C SIM	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R270024A	MS	METHOD	300.0	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R270258A	MS	METHOD	314.0	III
18-Jul-2011	SL-127-SA6-SS-0.0-0.5MS	P348152R320748A	MS	3550B	8015M	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3050B	6010B	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3050B	6020	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3550B	8015B	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3550B	8015M	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3550B	8081A	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3550B	8082	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3550B	8151A	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3550B	8270C	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	3550B	8270C SIM	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	METHOD	300.0	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	METHOD	314.0	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	METHOD	6850	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	METHOD	7471A	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	METHOD	8015B	III
18-Jul-2011	SL-146-SA6-SS-0.0-0.5	6348159	N	METHOD	8015M	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3050B	6010B	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3050B	6020	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3060A	7199	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3550B	8015B	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3550B	8015M	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3550B	8081A	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3550B	8082	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3550B	8151A	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3550B	8270C	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	3550B	8270C SIM	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	METHOD	300.0	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	METHOD	314.0	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	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
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	METHOD	8015B	III
18-Jul-2011	SL-147-SA6-SS-0.0-0.5	6348160	N	METHOD	8015M	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3050B	6010B	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3050B	6020	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3060A	7199	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3550B	8015B	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3550B	8015M	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3550B	8081A	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3550B	8082	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3550B	8151A	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3550B	8270C	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	3550B	8270C SIM	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	METHOD	300.0	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	METHOD	314.0	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	METHOD	7471A	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	METHOD	8015B	III
18-Jul-2011	SL-142-SA6-SS-0.0-0.5	6348156	N	METHOD	8015M	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3050B	6010B	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3050B	6020	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3060A	7199	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3550B	8015B	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3550B	8015M	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3550B	8081A	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3550B	8082	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3550B	8151A	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3550B	8270C	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
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	3550B	8270C SIM	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	METHOD	300.0	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	METHOD	314.0	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	METHOD	7471A	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	METHOD	8015B	III
18-Jul-2011	SL-143-SA6-SS-0.0-0.5	6348157	N	METHOD	8015M	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3050B	6010B	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3050B	6020	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3060A	7199	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3550B	8015B	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3550B	8015M	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3550B	8081A	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3550B	8082	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3550B	8151A	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3550B	8270C	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	3550B	8270C SIM	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	METHOD	300.0	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	METHOD	314.0	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	METHOD	7471A	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	METHOD	8015B	III
18-Jul-2011	SL-148-SA6-SS-0.0-0.5	6348161	N	METHOD	8015M	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3050B	6010B	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3050B	6020	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3060A	7199	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3550B	8015B	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3550B	8015M	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3550B	8081A	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3550B	8082	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3550B	8151A	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3550B	8270C	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	3550B	8270C SIM	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	METHOD	300.0	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	METHOD	314.0	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	METHOD	7471A	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	METHOD	8015B	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5	6348162	N	METHOD	8015M	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5DUP	P348162D270329B	DUP	METHOD	300.0	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5DUP	P348162D270735B	DUP	METHOD	314.0	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5MS	P348162R270343B	MS	METHOD	300.0	III
18-Jul-2011	SL-150-SA6-SS-0.0-0.5MS	P348162R270821B	MS	METHOD	314.0	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	3050B	6010B	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	3050B	6020	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	3060A	7199	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	3550B	8081A	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	3550B	8082	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	3550B	8151A	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	3550B	8270C	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	3550B	8270C SIM	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	METHOD	300.0	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	METHOD	314.0	III
18-Jul-2011	SL-155-SA6-SS-0.0-0.5	6348164	N	METHOD	7471A	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	3050B	6010B	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
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	3050B	6020	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	3060A	7199	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	3550B	8081A	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	3550B	8082	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	3550B	8151A	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	3550B	8270C	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	3550B	8270C SIM	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	METHOD	300.0	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	METHOD	314.0	III
18-Jul-2011	SL-176-SA6-SS-0.0-0.5	6348165	N	METHOD	7471A	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	3050B	6010B	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	3050B	6020	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	3060A	7199	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	3550B	8081A	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	3550B	8082	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	3550B	8151A	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	3550B	8270C	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	3550B	8270C SIM	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	METHOD	300.0	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	METHOD	314.0	III
18-Jul-2011	SL-182-SA6-SS-0.0-0.5	6348166	N	METHOD	7471A	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	3050B	6010B	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	3050B	6020	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	3060A	7199	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	3550B	8081A	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	3550B	8082	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	3550B	8151A	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	3550B	8270C	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	3550B	8270C SIM	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	METHOD	300.0	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	METHOD	314.0	III
18-Jul-2011	SL-152-SA6-SS-0.0-0.5	6348163	N	METHOD	7471A	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	3050B	6010B	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	3050B	6020	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	3060A	7199	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	3550B	8081A	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	3550B	8082	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	3550B	8151A	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	3550B	8270C	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	3550B	8270C SIM	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	METHOD	300.0	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	METHOD	314.0	III
18-Jul-2011	SL-183-SA6-SS-0.0-0.5	6348167	N	METHOD	7471A	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	3050B	6010B	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	3050B	6020	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	3060A	7199	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	3550B	8081A	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	3550B	8082	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	3550B	8151A	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	3550B	8270C	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	3550B	8270C SIM	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	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
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	N	METHOD	314.0	III
18-Jul-2011	SL-184-SA6-SS-0.0-0.5	6348168	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: DE202 Laboratory: LL

EDD Filename: DE202_v3. eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-127-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 9:42:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-128-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 9:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-133-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 7:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-134-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 8:29:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-142-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 10:43:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-143-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 11:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-145-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 9:33:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-146-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 10:23:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-147-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.79	U	0.79	MDL	0.99	PQL	mg/Kg	UJ	Q

Sample ID: SL-148-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	72.6	J	5.83	MDL	97.9	PQL	mg/Kg	J	Z
TIN	3.40	J	0.313	MDL	9.79	PQL	mg/Kg	U	B
Zirconium	3.21	J	0.450	MDL	4.90	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	75.5	J	5.96	MDL	100	PQL	mg/Kg	J	Z
TIN	3.06	J	0.321	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	2.12	J	0.461	MDL	5.01	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	64.7	J	5.81	MDL	97.7	PQL	mg/Kg	J	Z
TIN	2.89	J	0.313	MDL	9.77	PQL	mg/Kg	U	B
Zirconium	3.25	J	0.449	MDL	4.89	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	78.2	J	5.89	MDL	99.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-134-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 8:29:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	4.37	J	0.317	MDL	9.90	PQL	mg/Kg	U	B
Zirconium	2.81	J	0.456	MDL	4.95	PQL	mg/Kg	J	Z

Sample ID: SL-142-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:43:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	56.9	J	5.99	MDL	101	PQL	mg/Kg	J	Z
TIN	2.99	J	0.322	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.74	J	0.463	MDL	5.03	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	67.9	J	5.80	MDL	97.5	PQL	mg/Kg	J	Z
TIN	2.83	J	0.312	MDL	9.75	PQL	mg/Kg	U	B
Zirconium	2.77	J	0.449	MDL	4.88	PQL	mg/Kg	J	Z

Sample ID: SL-145-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 9:33:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	64.1	J	5.90	MDL	99.2	PQL	mg/Kg	J	Z
TIN	2.90	J	0.318	MDL	9.92	PQL	mg/Kg	U	B
Zirconium	2.79	J	0.456	MDL	4.96	PQL	mg/Kg	J	Z

Sample ID: SL-146-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:23:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.74	J	0.360	MDL	5.00	PQL	mg/Kg	J	Z
SODIUM	72.5	J	5.95	MDL	100	PQL	mg/Kg	J	Z
TIN	3.08	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	3.25	J	0.460	MDL	5.00	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-147-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 10:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	74.1	J	5.88	MDL	98.8	PQL	mg/Kg	J	Z
TIN	2.94	J	0.316	MDL	9.88	PQL	mg/Kg	U	B
Zirconium	3.33	J	0.455	MDL	4.94	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 11:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	66.9	J	5.85	MDL	98.3	PQL	mg/Kg	J	Z
TIN	3.10	J	0.315	MDL	9.83	PQL	mg/Kg	U	B
Zirconium	3.24	J	0.452	MDL	4.92	PQL	mg/Kg	J	Z

Sample ID: SL-150-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 12:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	64.2	J	5.95	MDL	100	PQL	mg/Kg	J	Z
TIN	2.95	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	3.15	J	0.460	MDL	5.00	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 3:08:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.63	J	0.353	MDL	4.90	PQL	mg/Kg	J	Z
SODIUM	69.7	J	5.83	MDL	98.0	PQL	mg/Kg	J	Z
TIN	2.89	J	0.314	MDL	9.80	PQL	mg/Kg	U	B
Zirconium	2.53	J	0.451	MDL	4.90	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 2:16:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.08	J	0.360	MDL	5.01	PQL	mg/Kg	J	Z
SODIUM	64.8	J	5.96	MDL	100	PQL	mg/Kg	J	Z
TIN	2.93	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	3.07	J	0.461	MDL	5.01	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-176-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.89	J	0.360	MDL	5.00	PQL	mg/Kg	J	Z
SODIUM	67.7	J	5.95	MDL	99.9	PQL	mg/Kg	J	Z
TIN	3.07	J	0.320	MDL	9.99	PQL	mg/Kg	U	B
Zirconium	2.92	J	0.460	MDL	5.00	PQL	mg/Kg	U	B

Sample ID: SL-182-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.10	J	0.352	MDL	4.88	PQL	mg/Kg	J	Z
TIN	3.06	J	0.313	MDL	9.77	PQL	mg/Kg	U	B
Zirconium	2.20	J	0.449	MDL	4.88	PQL	mg/Kg	U	B

Sample ID: SL-183-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.47	J	0.355	MDL	4.93	PQL	mg/Kg	J	Z
SODIUM	73.3	J	5.87	MDL	98.7	PQL	mg/Kg	J	Z
TIN	2.99	J	0.316	MDL	9.87	PQL	mg/Kg	U	B
Zirconium	3.19	J	0.454	MDL	4.93	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.30	J	0.352	MDL	4.89	PQL	mg/Kg	J	Z
SODIUM	71.0	J	5.82	MDL	97.9	PQL	mg/Kg	J	Z
TIN	2.69	J	0.313	MDL	9.79	PQL	mg/Kg	U	B
Zirconium	3.34	J	0.450	MDL	4.89	PQL	mg/Kg	J	Z

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.99	J	0.364	MDL	5.05	PQL	mg/Kg	J	Z
SODIUM	65.0	J	6.01	MDL	101	PQL	mg/Kg	J	Z
TIN	3.08	J	0.323	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.85	J	0.465	MDL	5.05	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.105	J	0.0585	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.808		0.0504	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 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
BARIUM	146		0.107	MDL	0.403	PQL	mg/Kg	J	A

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.168	J	0.0746	MDL	0.202	PQL	mg/Kg	J	Z, Q
ARSENIC	13.4		0.0807	MDL	0.403	PQL	mg/Kg	J	A
BERYLLIUM	0.799		0.0161	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	0.585		0.0444	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	23.4		0.121	MDL	0.403	PQL	mg/Kg	J	Q, A
COBALT	8.56		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, A
COPPER	12.0		0.0807	MDL	0.403	PQL	mg/Kg	J	Q, A
LEAD	17.1		0.0103	MDL	0.202	PQL	mg/Kg	J	E, A
NICKEL	18.2		0.101	MDL	0.403	PQL	mg/Kg	J	Q, A
SILVER	0.0793	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.341		0.0303	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	44.6		0.0222	MDL	0.101	PQL	mg/Kg	J	A
ZINC	95.8		0.565	MDL	3.03	PQL	mg/Kg	J	A

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0587	MDL	0.405	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.755		0.0506	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	144		0.107	MDL	0.405	PQL	mg/Kg	J	A

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0946	J	0.0749	MDL	0.202	PQL	mg/Kg	J	Z, Q
ARSENIC	12.3		0.0810	MDL	0.405	PQL	mg/Kg	J	A
BERYLLIUM	0.813		0.0162	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	0.287		0.0445	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	19.7		0.121	MDL	0.405	PQL	mg/Kg	J	Q, A
COBALT	7.15		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, A
COPPER	10.8		0.0810	MDL	0.405	PQL	mg/Kg	J	Q, A
LEAD	9.47		0.0103	MDL	0.202	PQL	mg/Kg	J	E, A
NICKEL	14.9		0.101	MDL	0.405	PQL	mg/Kg	J	Q, A
SILVER	0.0624	J	0.0144	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.324		0.0304	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	39.7		0.0223	MDL	0.101	PQL	mg/Kg	J	A
ZINC	79.7		0.567	MDL	3.04	PQL	mg/Kg	J	A

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0578	MDL	0.399	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.654		0.0498	MDL	0.0996	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	137		0.106	MDL	0.399	PQL	mg/Kg	J	A

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0925	J	0.0737	MDL	0.199	PQL	mg/Kg	J	Z, Q
ARSENIC	12.2		0.0797	MDL	0.399	PQL	mg/Kg	J	A
BERYLLIUM	0.761		0.0159	MDL	0.0996	PQL	mg/Kg	J	Q
CADMIUM	0.602		0.0438	MDL	0.0996	PQL	mg/Kg	J	Q
CHROMIUM	19.7		0.120	MDL	0.399	PQL	mg/Kg	J	Q, A
COBALT	7.30		0.0199	MDL	0.0996	PQL	mg/Kg	J	Q, A
COPPER	12.0		0.0797	MDL	0.399	PQL	mg/Kg	J	Q, A
LEAD	17.6		0.0102	MDL	0.199	PQL	mg/Kg	J	E, A
NICKEL	15.6		0.0996	MDL	0.399	PQL	mg/Kg	J	Q, A
SILVER	0.0548	J	0.0141	MDL	0.0996	PQL	mg/Kg	J	Z, Q
THALLIUM	0.305		0.0299	MDL	0.0996	PQL	mg/Kg	J	Q
VANADIUM	39.8		0.0219	MDL	0.0996	PQL	mg/Kg	J	A
ZINC	87.1		0.558	MDL	2.99	PQL	mg/Kg	J	A

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.793		0.0495	MDL	0.0990	PQL	mg/Kg	J	Q

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	118		0.105	MDL	0.396	PQL	mg/Kg	J	A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-134-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 8:29:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.214		0.0733	MDL	0.198	PQL	mg/Kg	J	Q
ARSENIC	12.2		0.0792	MDL	0.396	PQL	mg/Kg	J	A
BERYLLIUM	0.704		0.0158	MDL	0.0990	PQL	mg/Kg	J	Q
CADMIUM	0.544		0.0436	MDL	0.0990	PQL	mg/Kg	J	Q
CHROMIUM	20.3		0.119	MDL	0.396	PQL	mg/Kg	J	Q, A
COBALT	7.31		0.0198	MDL	0.0990	PQL	mg/Kg	J	Q, A
COPPER	14.1		0.0792	MDL	0.396	PQL	mg/Kg	J	Q, A
LEAD	17.7		0.0101	MDL	0.198	PQL	mg/Kg	J	E, A
NICKEL	15.7		0.0990	MDL	0.396	PQL	mg/Kg	J	Q, A
SILVER	0.0670	J	0.0141	MDL	0.0990	PQL	mg/Kg	J	Z, Q
THALLIUM	0.301		0.0297	MDL	0.0990	PQL	mg/Kg	J	Q
VANADIUM	40.9		0.0218	MDL	0.0990	PQL	mg/Kg	J	A
ZINC	87.4		0.555	MDL	2.97	PQL	mg/Kg	J	A

Sample ID: SL-142-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:43:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0584	MDL	0.402	PQL	mg/Kg	J	Z

Sample ID: SL-142-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:43:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.990		0.0503	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-142-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:43:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	149		0.107	MDL	0.402	PQL	mg/Kg	J	A

Sample ID: SL-142-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:43:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.191	J	0.0745	MDL	0.201	PQL	mg/Kg	J	Z, Q
ARSENIC	11.2		0.0805	MDL	0.402	PQL	mg/Kg	J	A
BERYLLIUM	0.680		0.0161	MDL	0.101	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-142-SA6-SS-0.0-0.5 **Collected: 7/18/2011 10:43:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	2.05		0.0443	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	18.1		0.121	MDL	0.402	PQL	mg/Kg	J	Q, A
COBALT	7.35		0.0201	MDL	0.101	PQL	mg/Kg	J	Q, A
COPPER	12.9		0.0805	MDL	0.402	PQL	mg/Kg	J	Q, A
LEAD	19.3		0.0103	MDL	0.201	PQL	mg/Kg	J	E, A
NICKEL	14.6		0.101	MDL	0.402	PQL	mg/Kg	J	Q, A
SILVER	0.0687	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.282		0.0302	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	35.9		0.0221	MDL	0.101	PQL	mg/Kg	J	A
ZINC	109		0.563	MDL	3.02	PQL	mg/Kg	J	A

Sample ID: SL-143-SA6-SS-0.0-0.5 **Collected: 7/18/2011 11:10:00** **Analysis Type: REA** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0577	MDL	0.398	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA6-SS-0.0-0.5 **Collected: 7/18/2011 11:10:00** **Analysis Type: REA2** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.830		0.0497	MDL	0.0994	PQL	mg/Kg	J	Q

Sample ID: SL-143-SA6-SS-0.0-0.5 **Collected: 7/18/2011 11:10:00** **Analysis Type: REA3** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.105	MDL	0.398	PQL	mg/Kg	J	A

Sample ID: SL-143-SA6-SS-0.0-0.5 **Collected: 7/18/2011 11:10:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	2.33		0.0736	MDL	0.199	PQL	mg/Kg	J	Q
ARSENIC	15.2		0.0795	MDL	0.398	PQL	mg/Kg	J	A
BERYLLIUM	0.848		0.0159	MDL	0.0994	PQL	mg/Kg	J	Q
CADMIUM	0.441		0.0437	MDL	0.0994	PQL	mg/Kg	J	Q
CHROMIUM	22.6		0.119	MDL	0.398	PQL	mg/Kg	J	Q, A
COBALT	8.47		0.0199	MDL	0.0994	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 Laboratory: LL

EDD Filename: DE202_v3. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-143-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	12.9		0.0795	MDL	0.398	PQL	mg/Kg	J	Q, A
LEAD	29.5		0.0101	MDL	0.199	PQL	mg/Kg	J	E, A
NICKEL	17.2		0.0994	MDL	0.398	PQL	mg/Kg	J	Q, A
SILVER	0.249		0.0141	MDL	0.0994	PQL	mg/Kg	J	Q
THALLIUM	0.400		0.0298	MDL	0.0994	PQL	mg/Kg	J	Q
VANADIUM	45.1		0.0219	MDL	0.0994	PQL	mg/Kg	J	A
ZINC	91.0		0.557	MDL	2.98	PQL	mg/Kg	J	A

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0587	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.848		0.0506	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.107	MDL	0.405	PQL	mg/Kg	J	A

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.132	J	0.0749	MDL	0.202	PQL	mg/Kg	J	Z, Q
ARSENIC	12.5		0.0810	MDL	0.405	PQL	mg/Kg	J	A
BERYLLIUM	0.809		0.0162	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	0.445		0.0445	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	23.3		0.121	MDL	0.405	PQL	mg/Kg	J	Q, A
COBALT	8.43		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, A
COPPER	12.2		0.0810	MDL	0.405	PQL	mg/Kg	J	Q, A
LEAD	20.0		0.0103	MDL	0.202	PQL	mg/Kg	J	E, A
NICKEL	17.8		0.101	MDL	0.405	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0585	J	0.0144	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.364		0.0304	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	46.8		0.0223	MDL	0.101	PQL	mg/Kg	J	A
ZINC	93.1		0.567	MDL	3.04	PQL	mg/Kg	J	A

Sample ID: SL-146-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:23:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z

Sample ID: SL-146-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:23:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.686		0.0495	MDL	0.0990	PQL	mg/Kg	J	Q

Sample ID: SL-146-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:23:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	129		0.105	MDL	0.396	PQL	mg/Kg	J	A

Sample ID: SL-146-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:23:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.218		0.0732	MDL	0.198	PQL	mg/Kg	J	Q
ARSENIC	6.67		0.0792	MDL	0.396	PQL	mg/Kg	J	A
BERYLLIUM	0.702		0.0158	MDL	0.0990	PQL	mg/Kg	J	Q
CADMIUM	0.247		0.0436	MDL	0.0990	PQL	mg/Kg	J	Q
CHROMIUM	22.5		0.119	MDL	0.396	PQL	mg/Kg	J	Q, A
COBALT	8.07		0.0198	MDL	0.0990	PQL	mg/Kg	J	Q, A
COPPER	12.4		0.0792	MDL	0.396	PQL	mg/Kg	J	Q, A
LEAD	12.7		0.0101	MDL	0.198	PQL	mg/Kg	J	E, A
NICKEL	17.4		0.0990	MDL	0.396	PQL	mg/Kg	J	Q, A
SILVER	0.0604	J	0.0141	MDL	0.0990	PQL	mg/Kg	J	Z, Q
THALLIUM	0.351		0.0297	MDL	0.0990	PQL	mg/Kg	J	Q
VANADIUM	45.9		0.0218	MDL	0.0990	PQL	mg/Kg	J	A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 Laboratory: LL

EDD Filename: DE202_v3. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-146-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 10:23:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	90.1		0.554	MDL	2.97	PQL	mg/Kg	J	A

Sample ID: SL-147-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 10:25:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0573	MDL	0.395	PQL	mg/Kg	J	Z

Sample ID: SL-147-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 10:25:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.766		0.0494	MDL	0.0988	PQL	mg/Kg	J	Q

Sample ID: SL-147-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 10:25:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.105	MDL	0.395	PQL	mg/Kg	J	A

Sample ID: SL-147-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 10:25:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.138	J	0.0731	MDL	0.198	PQL	mg/Kg	J	Z, Q
ARSENIC	11.0		0.0790	MDL	0.395	PQL	mg/Kg	J	A
BERYLLIUM	0.681		0.0158	MDL	0.0988	PQL	mg/Kg	J	Q
CADMIUM	0.648		0.0435	MDL	0.0988	PQL	mg/Kg	J	Q
CHROMIUM	17.7		0.119	MDL	0.395	PQL	mg/Kg	J	Q, A
COBALT	6.73		0.0198	MDL	0.0988	PQL	mg/Kg	J	Q, A
COPPER	12.0		0.0790	MDL	0.395	PQL	mg/Kg	J	Q, A
LEAD	13.3		0.0101	MDL	0.198	PQL	mg/Kg	J	E, A
NICKEL	13.6		0.0988	MDL	0.395	PQL	mg/Kg	J	Q, A
SILVER	0.0642	J	0.0140	MDL	0.0988	PQL	mg/Kg	J	Z, Q
THALLIUM	0.316		0.0296	MDL	0.0988	PQL	mg/Kg	J	Q
VANADIUM	36.5		0.0217	MDL	0.0988	PQL	mg/Kg	J	A
ZINC	105		0.553	MDL	2.96	PQL	mg/Kg	J	A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-148-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 11:40:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0581	MDL	0.401	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 11:40:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.818		0.0501	MDL	0.100	PQL	mg/Kg	J	Q

Sample ID: SL-148-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 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
BARIUM	140		0.106	MDL	0.401	PQL	mg/Kg	J	A

Sample ID: SL-148-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 11:40:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.216		0.0742	MDL	0.200	PQL	mg/Kg	J	Q
ARSENIC	6.14		0.0802	MDL	0.401	PQL	mg/Kg	J	A
BERYLLIUM	0.713		0.0160	MDL	0.100	PQL	mg/Kg	J	Q
CADMIUM	0.452		0.0441	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	26.4		0.120	MDL	0.401	PQL	mg/Kg	J	Q, A
COBALT	8.53		0.0200	MDL	0.100	PQL	mg/Kg	J	Q, A
COPPER	15.2		0.0802	MDL	0.401	PQL	mg/Kg	J	Q, A
LEAD	19.1		0.0102	MDL	0.200	PQL	mg/Kg	J	E, A
NICKEL	19.1		0.100	MDL	0.401	PQL	mg/Kg	J	Q, A
SILVER	0.0808	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q
THALLIUM	0.336		0.0301	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	48.0		0.0221	MDL	0.100	PQL	mg/Kg	J	A
ZINC	106		0.561	MDL	3.01	PQL	mg/Kg	J	A

Sample ID: SL-150-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 12:00:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0563	MDL	0.388	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-150-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 12:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.869		0.0485	MDL	0.0971	PQL	mg/Kg	J	Q

Sample ID: SL-150-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 12:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.103	MDL	0.388	PQL	mg/Kg	J	A

Sample ID: SL-150-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.179	J	0.0718	MDL	0.194	PQL	mg/Kg	J	Z, Q
ARSENIC	5.28		0.0777	MDL	0.388	PQL	mg/Kg	J	A
BERYLLIUM	0.620		0.0155	MDL	0.0971	PQL	mg/Kg	J	Q
CADMIUM	0.319		0.0427	MDL	0.0971	PQL	mg/Kg	J	Q
CHROMIUM	23.9		0.116	MDL	0.388	PQL	mg/Kg	J	Q, A
COBALT	7.87		0.0194	MDL	0.0971	PQL	mg/Kg	J	Q, A
COPPER	14.4		0.0777	MDL	0.388	PQL	mg/Kg	J	Q, A
LEAD	13.9		0.0099	MDL	0.194	PQL	mg/Kg	J	E, A
NICKEL	16.3		0.0971	MDL	0.388	PQL	mg/Kg	J	Q, A
SILVER	0.0588	J	0.0138	MDL	0.0971	PQL	mg/Kg	J	Z, Q
THALLIUM	0.307		0.0291	MDL	0.0971	PQL	mg/Kg	J	Q
VANADIUM	44.4		0.0214	MDL	0.0971	PQL	mg/Kg	J	A
ZINC	92.0		0.544	MDL	2.91	PQL	mg/Kg	J	A

Sample ID: SL-152-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:08:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0558	MDL	0.385	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:08:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.874		0.0481	MDL	0.0962	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-152-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 3:08:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	153		0.102	MDL	0.385	PQL	mg/Kg	J	A

Sample ID: SL-152-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 3:08:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.165	J	0.0712	MDL	0.192	PQL	mg/Kg	J	Z, Q
ARSENIC	4.85		0.0769	MDL	0.385	PQL	mg/Kg	J	A
BERYLLIUM	0.757		0.0154	MDL	0.0962	PQL	mg/Kg	J	Q
CADMIUM	0.430		0.0423	MDL	0.0962	PQL	mg/Kg	J	Q
CHROMIUM	24.3		0.115	MDL	0.385	PQL	mg/Kg	J	Q, A
COBALT	7.82		0.0192	MDL	0.0962	PQL	mg/Kg	J	Q, A
COPPER	13.1		0.0769	MDL	0.385	PQL	mg/Kg	J	Q, A
LEAD	13.4		0.0098	MDL	0.192	PQL	mg/Kg	J	E, A
NICKEL	18.0		0.0962	MDL	0.385	PQL	mg/Kg	J	Q, A
SILVER	0.0567	J	0.0137	MDL	0.0962	PQL	mg/Kg	J	Z, Q
THALLIUM	0.344		0.0288	MDL	0.0962	PQL	mg/Kg	J	Q
VANADIUM	44.9		0.0212	MDL	0.0962	PQL	mg/Kg	J	A
ZINC	81.9		0.538	MDL	2.88	PQL	mg/Kg	J	A

Sample ID: SL-155-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 2:16:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0575	MDL	0.397	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 2:16:00 **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		0.0496	MDL	0.0991	PQL	mg/Kg	J	Q

Sample ID: SL-155-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 2:16:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.105	MDL	0.397	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-155-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 2:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0931	J	0.0734	MDL	0.198	PQL	mg/Kg	J	Z, Q
ARSENIC	4.42		0.0793	MDL	0.397	PQL	mg/Kg	J	A
BERYLLIUM	0.662		0.0159	MDL	0.0991	PQL	mg/Kg	J	Q
CADMIUM	0.252		0.0436	MDL	0.0991	PQL	mg/Kg	J	Q
CHROMIUM	21.0		0.119	MDL	0.397	PQL	mg/Kg	J	Q, A
COBALT	7.05		0.0198	MDL	0.0991	PQL	mg/Kg	J	Q, A
COPPER	10.9		0.0793	MDL	0.397	PQL	mg/Kg	J	Q, A
LEAD	9.99		0.0101	MDL	0.198	PQL	mg/Kg	J	E, A
NICKEL	15.4		0.0991	MDL	0.397	PQL	mg/Kg	J	Q, A
SILVER	0.0430	J	0.0141	MDL	0.0991	PQL	mg/Kg	J	Z, Q
THALLIUM	0.332		0.0297	MDL	0.0991	PQL	mg/Kg	J	Q
VANADIUM	41.8		0.0218	MDL	0.0991	PQL	mg/Kg	J	A
ZINC	74.2		0.555	MDL	2.97	PQL	mg/Kg	J	A

Sample ID: **SL-176-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 2:34:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z

Sample ID: **SL-176-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 2:34:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.666		0.0495	MDL	0.0989	PQL	mg/Kg	J	Q

Sample ID: **SL-176-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 2:34:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	133		0.105	MDL	0.396	PQL	mg/Kg	J	A

Sample ID: **SL-176-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 2:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.116	J	0.0732	MDL	0.198	PQL	mg/Kg	J	Z, Q
ARSENIC	4.21		0.0792	MDL	0.396	PQL	mg/Kg	J	A
BERYLLIUM	0.669		0.0158	MDL	0.0989	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-176-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:34:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.334		0.0435	MDL	0.0989	PQL	mg/Kg	J	Q
CHROMIUM	19.6		0.119	MDL	0.396	PQL	mg/Kg	J	Q, A
COBALT	6.95		0.0198	MDL	0.0989	PQL	mg/Kg	J	Q, A
COPPER	10.8		0.0792	MDL	0.396	PQL	mg/Kg	J	Q, A
LEAD	10.7		0.0101	MDL	0.198	PQL	mg/Kg	J	E, A
NICKEL	15.3		0.0989	MDL	0.396	PQL	mg/Kg	J	Q, A
SILVER	0.0520	J	0.0141	MDL	0.0989	PQL	mg/Kg	J	Z, Q
THALLIUM	0.296		0.0297	MDL	0.0989	PQL	mg/Kg	J	Q
VANADIUM	39.4		0.0218	MDL	0.0989	PQL	mg/Kg	J	A
ZINC	87.5		0.554	MDL	2.97	PQL	mg/Kg	J	A

Sample ID: SL-182-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0928	J	0.0584	MDL	0.402	PQL	mg/Kg	J	Z

Sample ID: SL-182-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.664		0.0503	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-182-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	137		0.107	MDL	0.402	PQL	mg/Kg	J	A

Sample ID: SL-182-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0744	MDL	0.201	PQL	mg/Kg	J	Z, Q
ARSENIC	5.99		0.0805	MDL	0.402	PQL	mg/Kg	J	A
BERYLLIUM	0.639		0.0161	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	0.252		0.0443	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	20.0		0.121	MDL	0.402	PQL	mg/Kg	J	Q, A
COBALT	8.07		0.0201	MDL	0.101	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-182-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 2:45:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.3		0.0805	MDL	0.402	PQL	mg/Kg	J	Q, A
LEAD	10.2		0.0103	MDL	0.201	PQL	mg/Kg	J	E, A
NICKEL	13.5		0.101	MDL	0.402	PQL	mg/Kg	J	Q, A
SILVER	0.0516	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.347		0.0302	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	43.5		0.0221	MDL	0.101	PQL	mg/Kg	J	A
ZINC	111		0.563	MDL	3.02	PQL	mg/Kg	J	A

Sample ID: SL-183-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 3:20:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0949	J	0.0578	MDL	0.399	PQL	mg/Kg	J	Z

Sample ID: SL-183-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 3:20:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.662		0.0498	MDL	0.0997	PQL	mg/Kg	J	Q

Sample ID: SL-183-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 3:20:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.106	MDL	0.399	PQL	mg/Kg	J	A

Sample ID: SL-183-SA6-SS-0.0-0.5 **Collected:** 7/18/2011 3:20:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.102	J	0.0738	MDL	0.199	PQL	mg/Kg	J	Z, Q
ARSENIC	5.11		0.0797	MDL	0.399	PQL	mg/Kg	J	A
BERYLLIUM	0.724		0.0159	MDL	0.0997	PQL	mg/Kg	J	Q
CADMIUM	0.291		0.0439	MDL	0.0997	PQL	mg/Kg	J	Q
CHROMIUM	19.6		0.120	MDL	0.399	PQL	mg/Kg	J	Q, A
COBALT	6.72		0.0199	MDL	0.0997	PQL	mg/Kg	J	Q, A
COPPER	9.38		0.0797	MDL	0.399	PQL	mg/Kg	J	Q, A
LEAD	9.45		0.0102	MDL	0.199	PQL	mg/Kg	J	E, A
NICKEL	12.9		0.0997	MDL	0.399	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-183-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0389	J	0.0142	MDL	0.0997	PQL	mg/Kg	J	Z, Q
THALLIUM	0.362		0.0299	MDL	0.0997	PQL	mg/Kg	J	Q
VANADIUM	39.4		0.0219	MDL	0.0997	PQL	mg/Kg	J	A
ZINC	85.4		0.558	MDL	2.99	PQL	mg/Kg	J	A

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0579	MDL	0.399	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.726		0.0499	MDL	0.0998	PQL	mg/Kg	J	Q

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.106	MDL	0.399	PQL	mg/Kg	J	A

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0739	MDL	0.200	PQL	mg/Kg	J	Z, Q
ARSENIC	3.24		0.0799	MDL	0.399	PQL	mg/Kg	J	A
BERYLLIUM	0.573		0.0160	MDL	0.0998	PQL	mg/Kg	J	Q
CADMIUM	0.548		0.0439	MDL	0.0998	PQL	mg/Kg	J	Q
CHROMIUM	49.9		0.120	MDL	0.399	PQL	mg/Kg	J	Q, A
COBALT	6.05		0.0200	MDL	0.0998	PQL	mg/Kg	J	Q, A
COPPER	10.9		0.0799	MDL	0.399	PQL	mg/Kg	J	Q, A
LEAD	18.5		0.0102	MDL	0.200	PQL	mg/Kg	J	E, A
NICKEL	23.4		0.0998	MDL	0.399	PQL	mg/Kg	J	Q, A
SILVER	0.0729	J	0.0142	MDL	0.0998	PQL	mg/Kg	J	Z, Q
THALLIUM	0.241		0.0299	MDL	0.0998	PQL	mg/Kg	J	Q
VANADIUM	31.8		0.0220	MDL	0.0998	PQL	mg/Kg	J	A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	159		0.559	MDL	2.99	PQL	mg/Kg	J	A

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.174	J	0.0569	MDL	0.392	PQL	mg/Kg	J	Z

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.486		0.0490	MDL	0.0981	PQL	mg/Kg	J	Q

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	94.1		0.104	MDL	0.392	PQL	mg/Kg	J	A

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0726	MDL	0.196	PQL	mg/Kg	J	Z, Q
ARSENIC	6.45		0.0785	MDL	0.392	PQL	mg/Kg	J	A
BERYLLIUM	0.613		0.0157	MDL	0.0981	PQL	mg/Kg	J	Q
CADMIUM	0.152		0.0431	MDL	0.0981	PQL	mg/Kg	J	Q
CHROMIUM	21.8		0.118	MDL	0.392	PQL	mg/Kg	J	Q, A
COBALT	6.70		0.0196	MDL	0.0981	PQL	mg/Kg	J	Q, A
COPPER	9.76		0.0785	MDL	0.392	PQL	mg/Kg	J	Q, A
LEAD	6.91		0.0100	MDL	0.196	PQL	mg/Kg	J	E, A
NICKEL	13.6		0.0981	MDL	0.392	PQL	mg/Kg	J	Q, A
SILVER	0.0401	J	0.0139	MDL	0.0981	PQL	mg/Kg	J	Z, Q
THALLIUM	0.278		0.0294	MDL	0.0981	PQL	mg/Kg	J	Q
VANADIUM	39.8		0.0216	MDL	0.0981	PQL	mg/Kg	J	A
ZINC	67.1		0.549	MDL	2.94	PQL	mg/Kg	J	A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: **SL-133-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 7:55:00** ***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	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: **SL-134-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 8:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: **SL-146-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: **SL-150-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 12:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: **SL-152-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 3:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: **SL-155-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 2:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: **SL-176-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 2:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.56	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: **SL-182-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 2:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-183-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

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

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0265	J	0.0068	MDL	0.0970	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0111	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0090	J	0.0067	MDL	0.0946	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0376	J	0.0068	MDL	0.0971	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0181	J	0.0068	MDL	0.0972	PQL	mg/Kg	J	Z

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0786	J	0.0067	MDL	0.0951	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-146-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0475	J	0.0067	MDL	0.0957	PQL	mg/Kg	J	Z

Sample ID: SL-150-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0627	J	0.0071	MDL	0.100	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0092	J	0.0069	MDL	0.0982	PQL	mg/Kg	J	Z

Sample ID: SL-182-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0426	J	0.0070	MDL	0.0998	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0127	J	0.0067	MDL	0.0953	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	5.0	J	2.0	MDL	6.0	PQL	mg/Kg	J	Z

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: **SL-127-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 9:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Propylene glycol	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q

Sample ID: **SL-128-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 9:14:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.62	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-133-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 7:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.3	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: **SL-134-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 8:29:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.1	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: **SL-142-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 10:43:00** ***Analysis Type:*** **REA** ***Dilution:*** **10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.5	J	4.1	MDL	12	PQL	mg/Kg	J	Z

Sample ID: **SL-145-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 9:33:00** ***Analysis Type:*** **REA** ***Dilution:*** **10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	6.3	J	4.0	MDL	12	PQL	mg/Kg	J	Z

Sample ID: **SL-146-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 10:23:00** ***Analysis Type:*** **REA** ***Dilution:*** **50**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	40	J	20	MDL	60	PQL	mg/Kg	J	Z

Sample ID: **SL-147-SA6-SS-0.0-0.5** ***Collected:*** **7/18/2011 10:25:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.4	J	2.0	MDL	6.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-148-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:40:00 *Analysis Type:* REA *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	5.0	J	4.1	MDL	12	PQL	mg/Kg	J	Z

Sample ID: SL-150-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 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
EFH (C8-C11)	0.78	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.3		0.40	MDL	1.2	PQL	mg/Kg	J	S
EFH (C21-C30)	12		0.40	MDL	1.2	PQL	mg/Kg	J	S
EFH (C30-C40)	25		0.40	MDL	1.2	PQL	mg/Kg	J	S
EFH (C8-C11)	1.1	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z, S

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.9		0.067	MDL	0.34	PQL	ug/Kg	J	S

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.1		0.067	MDL	0.35	PQL	ug/Kg	J	S

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.6		0.81	MDL	3.4	PQL	ug/Kg	J	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-142-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:43:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.4		0.067	MDL	0.34	PQL	ug/Kg	J	S
Chlordane	3.1	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z, S
gamma-BHC (Lindane)	0.13	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z, S

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.3	J	0.80	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-146-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.2	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z, S

Sample ID: SL-147-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
4,4'-DDE	0.41	U	0.41	MDL	0.41	PQL	ug/Kg	UJ	S
4,4'-DDT	0.89		0.067	MDL	0.34	PQL	ug/Kg	J	S, S
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.060	U	0.060	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	1.7	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z, S, S
DELTA-BHC	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.044	U	0.044	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.31	U	0.31	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN	0.081	U	0.081	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.11	U	0.11	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.10	U	0.10	MDL	0.17	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 Laboratory: LL

EDD Filename: DE202_v3. eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-147-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.70	U	0.70	MDL	0.70	PQL	ug/Kg	UJ	S
TOXAPHENE	2.2	U	2.2	MDL	6.7	PQL	ug/Kg	UJ	S

Sample ID: SL-148-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.0	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.091	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-176-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.093	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.078	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-183-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.1	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z
DIELDRIN	0.12	J	0.066	MDL	0.34	PQL	ug/Kg	J	Z

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.20		0.034	MDL	0.17	PQL	ug/Kg	J	S

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.068	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z
Aroclor 5460	3.0	J	1.0	MDL	3.3	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.1	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-148-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:40:00 *Analysis Type:* RES *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	62	J	20	MDL	67	PQL	ug/Kg	J	Z

Sample ID: SL-152-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-176-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.5	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-183-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:20:00 *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	0.48	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z
Aroclor 5460	1.7	J	1.0	MDL	3.3	PQL	ug/Kg	J	Z

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z
Aroclor 5460	1.2	J	1.0	MDL	3.3	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 Laboratory: LL

EDD Filename: DE202_v3. eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.40	U	0.40	MDL	1.2	PQL	ug/Kg	R	Q
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	J	0.81	MDL	2.4	PQL	ug/Kg	J	Z, L

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *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	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-142-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:43:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-143-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-146-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-147-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:25:00 *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	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-148-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.1	J	0.63	MDL	1.7	PQL	ug/Kg	J	Z
DINOSEB	0.82	U	0.82	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-150-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 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
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-152-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.15	J	0.075	MDL	0.17	PQL	ug/Kg	J	Z
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-155-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-176-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.5	J	1.2	MDL	3.6	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-182-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.55	J	0.40	MDL	1.2	PQL	ug/Kg	J	Z, L
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-183-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.2	J	0.62	MDL	1.7	PQL	ug/Kg	J	Z
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	2.1	J	1.2	MDL	3.6	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *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	340	U	340	MDL	1000	PQL	ug/Kg	R	Q
3,3'-DICHLOROBENZIDINE	100	U	100	MDL	340	PQL	ug/Kg	UJ	Q
4-CHLOROPHENYL-PHENYLETHER	34	U	34	MDL	170	PQL	ug/Kg	UJ	Q
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	R	Q
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	R	Q
BIS(2-CHLOROETHOXY)METHANE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
ISOPHORONE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *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	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

Sample ID: SL-133-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 7:55:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	29	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	54	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	63	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	49	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	26	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	39	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	39	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	61	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-142-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:43:00 *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	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	66	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-143-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:10:00 *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	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

Sample ID: SL-145-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	32	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-145-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 9:33:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	30	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	33	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	17	MDL	340	PQL	ug/Kg	J	Z
CHRYSENE	27	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	55	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	37	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	61	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-146-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:23:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	23	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
PYRENE	30	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-147-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:25:00 ***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	17	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	23	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
CHRYSENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	19	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-148-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 11:40:00 ***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	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-150-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 12:00:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-152-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 3:08:00 ***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	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	88	J	17	MDL	330	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 2:16:00 ***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	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

Sample ID: SL-176-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 2:34:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-182-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 2:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	34	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	57	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	48	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	21	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	17	MDL	340	PQL	ug/Kg	J	Z
CHRYSENE	33	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	39	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	35	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	40	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-183-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:20:00 *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	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *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	170	U	170	MDL	500	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	17	MDL	340	PQL	ug/Kg	J	Z
Di-n-butylphthalate	21	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *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	170	U	170	MDL	510	PQL	ug/Kg	UJ	L

Method Category: SVOA

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

Sample ID: SL-127-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:42:00 *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	2.3	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
PHENANTHRENE	6.6	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *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	3.9	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
Butylbenzylphthalate	40	J	30	MDL	91	PQL	ug/Kg	J	Z
CHRYSENE	3.9	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
FLUORANTHENE	6.0	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
PYRENE	5.2	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-133-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 7:55:00 ***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(G,H,I)PERYLENE	4.2	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.2	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z

Sample ID: SL-134-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 8:29:00 ***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	3.0	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	4.9	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-142-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:43:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	3.6	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z

Sample ID: SL-143-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 11:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	4.8	J	1.7	MDL	8.5	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.7	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z

Sample ID: SL-146-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 10:23:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.7	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	7.7	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.5	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
PHENANTHRENE	6.4	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-148-SA6-SS-0.0-0.5 ***Collected:*** 7/18/2011 11:40:00 ***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	3.5	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z
CHRYSENE	3.4	J	1.7	MDL	8.5	PQL	ug/Kg	J	Z
Di-n-octylphthalate	40	J	31	MDL	92	PQL	ug/Kg	J	Z
FLUORANTHENE	4.2	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-148-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:40:00 *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	3.7	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z

Sample ID: SL-150-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	4.6	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	4.3	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.7	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	3.5	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	3.4	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
CHRYSENE	6.7	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	4.2	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	7.6	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	3.6	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	3.6	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
FLUORANTHENE	3.4	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-176-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 2:34:00 *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	5.0	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
CHRYSENE	4.8	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
Di-n-butylphthalate	46	J	30	MDL	91	PQL	ug/Kg	J	Z
FLUORANTHENE	5.9	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
PYRENE	5.1	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-183-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	2.0	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-184-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 3:27:00 *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(B)FLUORANTHENE	0.97	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.99	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.85	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.55	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	16	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.7	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.4	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.2	J	6.1	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-128-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	290	J	100	MDL	510	PQL	ug/Kg	J	Z
METHANOL	340	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-134-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	100	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-142-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	160	J	100	MDL	510	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-142-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	230	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-143-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	290	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-146-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:23:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	R	S
O-TERPHENYL	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	R	S
p-Terphenyl	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	R	S

Sample ID: SL-147-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 10:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	180	J	100	MDL	500	PQL	ug/Kg	J	Z
Isopropanol	160	J	100	MDL	500	PQL	ug/Kg	J	Z

Sample ID: SL-148-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	330	J	100	MDL	510	PQL	ug/Kg	J	Z
Isopropanol	140	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-293-SA6-SS-0.0-0.5 *Collected:* 7/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	110	J	100	MDL	510	PQL	ug/Kg	J	Z
Isopropanol	140	J	100	MDL	510	PQL	ug/Kg	J	Z
METHANOL	450	J	100	MDL	510	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE202

Method Blank Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory:** LL

EDD Filename: DE202_v3. **eQAPP Name:** CDM_SSFL_110509

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20108CB222043	7/28/2011 8:43:00 PM	BORON	0.606 mg/Kg	SL-127-SA6-SS-0.0-0.5
		CALCIUM	8.49 mg/Kg	SL-128-SA6-SS-0.0-0.5
		MANGANESE	0.0440 mg/Kg	SL-133-SA6-SS-0.0-0.5
		PHOSPHORUS	1.39 mg/Kg	SL-134-SA6-SS-0.0-0.5
		STRONTIUM	0.0460 mg/Kg	SL-142-SA6-SS-0.0-0.5
		TIN	1.63 mg/Kg	SL-143-SA6-SS-0.0-0.5
		TITANIUM	0.0830 mg/Kg	SL-145-SA6-SS-0.0-0.5
				SL-146-SA6-SS-0.0-0.5
				SL-147-SA6-SS-0.0-0.5
				SL-148-SA6-SS-0.0-0.5
				SL-150-SA6-SS-0.0-0.5
				SL-152-SA6-SS-0.0-0.5
				SL-155-SA6-SS-0.0-0.5
				SL-176-SA6-SS-0.0-0.5
				SL-182-SA6-SS-0.0-0.5
				SL-183-SA6-SS-0.0-0.5
				SL-184-SA6-SS-0.0-0.5
				SL-293-SA6-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-127-SA6-SS-0.0-0.5(RES)	TIN	3.40 mg/Kg	3.40U mg/Kg
SL-128-SA6-SS-0.0-0.5(RES)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-133-SA6-SS-0.0-0.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-134-SA6-SS-0.0-0.5(RES)	TIN	4.37 mg/Kg	4.37U mg/Kg
SL-142-SA6-SS-0.0-0.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-143-SA6-SS-0.0-0.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-145-SA6-SS-0.0-0.5(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-146-SA6-SS-0.0-0.5(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-147-SA6-SS-0.0-0.5(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-148-SA6-SS-0.0-0.5(RES)	TIN	3.10 mg/Kg	3.10U mg/Kg
SL-150-SA6-SS-0.0-0.5(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-152-SA6-SS-0.0-0.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-155-SA6-SS-0.0-0.5(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-176-SA6-SS-0.0-0.5(RES)	TIN	3.07 mg/Kg	3.07U mg/Kg
SL-182-SA6-SS-0.0-0.5(RES)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-183-SA6-SS-0.0-0.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-184-SA6-SS-0.0-0.5(RES)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-293-SA6-SS-0.0-0.5(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09091AB241826A	8/2/2011 6:26:00 PM	MCPP	530 ug/Kg	SL-127-SA6-SS-0.0-0.5 SL-128-SA6-SS-0.0-0.5 SL-133-SA6-SS-0.0-0.5 SL-134-SA6-SS-0.0-0.5 SL-142-SA6-SS-0.0-0.5 SL-143-SA6-SS-0.0-0.5 SL-145-SA6-SS-0.0-0.5 SL-146-SA6-SS-0.0-0.5 SL-147-SA6-SS-0.0-0.5 SL-148-SA6-SS-0.0-0.5 SL-150-SA6-SS-0.0-0.5 SL-152-SA6-SS-0.0-0.5 SL-155-SA6-SS-0.0-0.5 SL-176-SA6-SS-0.0-0.5 SL-182-SA6-SS-0.0-0.5 SL-183-SA6-SS-0.0-0.5 SL-184-SA6-SS-0.0-0.5 SL-293-SA6-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	14 44 59	12 42 58	59.00-109.00 63.00-107.00 63.00-107.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	0 17 -1851 -2249 0	0 -36 -683 -1067 0	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	- - 28 (20.00) - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	No Qual, Diluted Out

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	DICAMBA	0	-	10.00-190.00	200 (50.00)	DICAMBA	J(all detects) R(all non-detects)
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	DINOSEB	9	7	10.00-46.00	-	DINOSEB	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-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	159 147 152 127 151 160 206 148 156 169 163 189	136 154 153 - 150 159 262 146 156 168 146 171	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) As, Pb, V, Zn, No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **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-127-SA6-SS-0.0-0.5MS **SL-127-SA6-SS-0.0-0.5MSD** (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	ANTIMONY	44	42	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-127-SA6-SS-0.0-0.5MS **SL-127-SA6-SS-0.0-0.5MSD** (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	MOLYBDENUM	157	156	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-127-SA6-SS-0.0-0.5MS **SL-127-SA6-SS-0.0-0.5MSD** (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	BARIUM	236	204	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **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-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	ALUMINUM CALCIUM MAGNESIUM MANGANESE TITANIUM	1007 132 137 - 262	1212 142 - 162 288	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM MAGNESIUM MANGANESE TITANIUM	No Qual, >4x
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	IRON	-92	568	75.00-125.00	-	IRON	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	3-NITROANILINE 4,6-DINITRO-2-METHYLPHENOL 4-CHLOROANILINE 4-NITROANILINE ANILINE BENZO(K)FLUORANTHENE Di-n-octylphthalate HEXACHLOROCYCLOPENTADI	- - - - - - - -	- - - - - - - -	59.00-122.00 11.00-126.00 13.00-107.00 41.00-109.00 18.00-116.00 56.00-132.00 56.00-126.00 10.00-153.00	35 (30.00) 77 (30.00) 71 (30.00) 42 (30.00) 64 (30.00) 34 (30.00) 34 (30.00) 33 (30.00)	3-NITROANILINE 4,6-DINITRO-2-METHYLPHEN 4-CHLOROANILINE 4-NITROANILINE ANILINE BENZO(K)FLUORANTHENE Di-n-octylphthalate HEXACHLOROCYCLOPENTAD	J(all detects)
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	2,4-DINITROPHENOL BENZIDINE BENZOIC ACID	- 0 0	0 0 -	20.00-143.00 35.00-141.00 10.00-173.00	200 (30.00) - 200 (30.00)	2,4-DINITROPHENOL BENZIDINE BENZOIC ACID	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **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-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	3,3'-DICHLOROBENZIDINE	-	20	28.00-109.00	105 (30.00)	3,3'-DICHLOROBENZIDINE	J(all detects) UJ(all non-detects)
	4-CHLOROPHENYL-PHENYLET	-	74	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	BIS(2-CHLOROETHOXY)METHA	-	72	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	FLUORANTHENE	-	71	73.00-112.00	33 (30.00)	FLUORANTHENE	
	HEXACHLOROBENZENE	-	76	77.00-114.00	-	HEXACHLOROBENZENE	
	ISOPHORONE	-	72	73.00-102.00	-	ISOPHORONE	

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	BENZO(K)FLUORANTHENE	-	317	57.00-153.00	107 (30.00)	BENZO(K)FLUORANTHENE	No Qual, Diluted Out
	BIS(2-ETHYLHEXYL)PHTHALAT	-	170	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	187	180	57.00-173.00	-	Butylbenzylphthalate	
	DIBENZO(A,H)ANTHRACENE	-	-	22.00-133.00	37 (30.00)	DIBENZO(A,H)ANTHRACENE	
	Di-n-butylphthalate	172	177	65.00-148.00	-	Di-n-butylphthalate	
	Di-n-octylphthalate	219	221	40.00-192.00	-	Di-n-octylphthalate	
	INDENO(1,2,3-CD)PYRENE	-	-	21.00-143.00	84 (30.00)	INDENO(1,2,3-CD)PYRENE	
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	BENZO(B)FLUORANTHENE	-12	503	54.00-163.00	134 (30.00)	BENZO(B)FLUORANTHENE	No Qual, Diluted Out
SL-127-SA6-SS-0.0-0.5MS SL-127-SA6-SS-0.0-0.5MSD (SL-127-SA6-SS-0.0-0.5)	BENZO(A)ANTHRACENE	32	381	59.00-128.00	118 (30.00)	BENZO(A)ANTHRACENE	No Qual, Diluted Out
	BENZO(A)PYRENE	21	329	58.00-142.00	117 (30.00)	BENZO(A)PYRENE	
	BENZO(G,H,I)PERYLENE	19	-	33.00-141.00	78 (30.00)	BENZO(G,H,I)PERYLENE	
	CHRYSENE	31	420	67.00-123.00	120 (30.00)	CHRYSENE	
	FLUORANTHENE	22	280	51.00-149.00	98 (30.00)	FLUORANTHENE	
	PYRENE	21	264	51.00-131.00	97 (30.00)	PYRENE	

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-127-SA6-SS-0.0-0.5MS (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5)	FLUORIDE	43	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-127-SA6-SS-0.0-0.5DUP	ANTIMONY	23	20.00	
(SL-127-SA6-SS-0.0-0.5	LEAD	70	20.00	
SL -128-SA6-SS-0.0-0.5				
SL -133-SA6-SS-0.0-0.5				
SL -134-SA6-SS-0.0-0.5				
SL -142-SA6-SS-0.0-0.5				J(all detects) UJ(all non-detects)
SL -143-SA6-SS-0.0-0.5				
SL -145-SA6-SS-0.0-0.5				
SL -146-SA6-SS-0.0-0.5				
SL -147-SA6-SS-0.0-0.5				Sb, No Qual, OK by Difference
SL -148-SA6-SS-0.0-0.5				
SL -150-SA6-SS-0.0-0.5				
SL -152-SA6-SS-0.0-0.5				
SL -155-SA6-SS-0.0-0.5				
SL -176-SA6-SS-0.0-0.5				
SL -182-SA6-SS-0.0-0.5				
SL -183-SA6-SS-0.0-0.5				
SL -184-SA6-SS-0.0-0.5				
SL -293-SA6-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE202 Laboratory: LL

EDD Filename: DE202_v3. 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
P12091AQ241854A (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	DICAMBA	131	-	54.00-121.00	-	DICAMBA	J (all detects)
P12091AQ241854A (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	DINOSEB	9	-	10.00-36.00	-	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
P12105AQ240107A (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	ENDOSULFAN II	128	-	63.00-127.00	-	ENDOSULFAN II	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **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

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20126DQ221514A (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	ANTIMONY	78	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20108CQ222047 (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	ALUMINUM IRON TITANIUM	122 126 155	- - -	80.00-120.00 80.00-120.00 80.00-120.00	- - -	ALUMINUM IRON TITANIUM	No Qual, SRM within QC Limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **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*
P8LELCSQ260616 (SL-127-SA6-SS-0.0-0.5 SL -128-SA6-SS-0.0-0.5 SL -133-SA6-SS-0.0-0.5 SL -134-SA6-SS-0.0-0.5 SL -142-SA6-SS-0.0-0.5 SL -143-SA6-SS-0.0-0.5 SL -145-SA6-SS-0.0-0.5 SL -146-SA6-SS-0.0-0.5 SL -147-SA6-SS-0.0-0.5 SL -148-SA6-SS-0.0-0.5 SL -150-SA6-SS-0.0-0.5 SL -152-SA6-SS-0.0-0.5 SL -155-SA6-SS-0.0-0.5 SL -176-SA6-SS-0.0-0.5 SL -182-SA6-SS-0.0-0.5 SL -183-SA6-SS-0.0-0.5 SL -184-SA6-SS-0.0-0.5 SL -293-SA6-SS-0.0-0.5)	BENZOIC ACID	61	-	62.00-113.00	-	BENZOIC ACID	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-146-SA6-SS-0.0 -0.5	n-Triacontane-d62	6	50.00-150.00	All Target Analytes	J(all detects) R(all non-detects)

Method: 8015M
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-293-SA6-SS-0.0 -0.5	O-TERPHENYL	153	47.00-145.00	All Target Analytes	J(all detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-127-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	128	20.00-120.00	All Target Analytes	J (all detects)
SL-133-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	149	20.00-120.00	All Target Analytes	J(all detects)
SL-134-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	172	20.00-120.00	All Target Analytes	J(all detects)
SL-142-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	447	20.00-120.00	All Target Analytes	J(all detects)
SL-146-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	377	20.00-120.00	All Target Analytes	J(all detects)
SL-147-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	128	20.00-120.00	All Target Analytes	J(all detects)
SL-147-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	47	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-184-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	142	20.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA6-SS-0.0-0.5	SODIUM	J	72.6	97.9	PQL	mg/Kg	J (all detects)
	TIN	J	3.40	9.79	PQL	mg/Kg	
	Zirconium	J	3.21	4.90	PQL	mg/Kg	
SL-128-SA6-SS-0.0-0.5	SODIUM	J	75.5	100	PQL	mg/Kg	J (all detects)
	TIN	J	3.06	10.0	PQL	mg/Kg	
	Zirconium	J	2.12	5.01	PQL	mg/Kg	
SL-133-SA6-SS-0.0-0.5	SODIUM	J	64.7	97.7	PQL	mg/Kg	J (all detects)
	TIN	J	2.89	9.77	PQL	mg/Kg	
	Zirconium	J	3.25	4.89	PQL	mg/Kg	
SL-134-SA6-SS-0.0-0.5	SODIUM	J	78.2	99.0	PQL	mg/Kg	J (all detects)
	TIN	J	4.37	9.90	PQL	mg/Kg	
	Zirconium	J	2.81	4.95	PQL	mg/Kg	
SL-142-SA6-SS-0.0-0.5	SODIUM	J	56.9	101	PQL	mg/Kg	J (all detects)
	TIN	J	2.99	10.1	PQL	mg/Kg	
	Zirconium	J	1.74	5.03	PQL	mg/Kg	
SL-143-SA6-SS-0.0-0.5	SODIUM	J	67.9	97.5	PQL	mg/Kg	J (all detects)
	TIN	J	2.83	9.75	PQL	mg/Kg	
	Zirconium	J	2.77	4.88	PQL	mg/Kg	
SL-145-SA6-SS-0.0-0.5	SODIUM	J	64.1	99.2	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	9.92	PQL	mg/Kg	
	Zirconium	J	2.79	4.96	PQL	mg/Kg	
SL-146-SA6-SS-0.0-0.5	BORON	J	4.74	5.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.5	100	PQL	mg/Kg	
	TIN	J	3.08	10.0	PQL	mg/Kg	
	Zirconium	J	3.25	5.00	PQL	mg/Kg	
SL-147-SA6-SS-0.0-0.5	SODIUM	J	74.1	98.8	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	9.88	PQL	mg/Kg	
	Zirconium	J	3.33	4.94	PQL	mg/Kg	
SL-148-SA6-SS-0.0-0.5	SODIUM	J	66.9	98.3	PQL	mg/Kg	J (all detects)
	TIN	J	3.10	9.83	PQL	mg/Kg	
	Zirconium	J	3.24	4.92	PQL	mg/Kg	
SL-150-SA6-SS-0.0-0.5	SODIUM	J	64.2	100	PQL	mg/Kg	J (all detects)
	TIN	J	2.95	10.0	PQL	mg/Kg	
	Zirconium	J	3.15	5.00	PQL	mg/Kg	
SL-152-SA6-SS-0.0-0.5	BORON	J	4.63	4.90	PQL	mg/Kg	J (all detects)
	SODIUM	J	69.7	98.0	PQL	mg/Kg	
	TIN	J	2.89	9.80	PQL	mg/Kg	
	Zirconium	J	2.53	4.90	PQL	mg/Kg	
SL-155-SA6-SS-0.0-0.5	BORON	J	4.08	5.01	PQL	mg/Kg	J (all detects)
	SODIUM	J	64.8	100	PQL	mg/Kg	
	TIN	J	2.93	10.0	PQL	mg/Kg	
	Zirconium	J	3.07	5.01	PQL	mg/Kg	
SL-176-SA6-SS-0.0-0.5	BORON	J	4.89	5.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.7	99.9	PQL	mg/Kg	
	TIN	J	3.07	9.99	PQL	mg/Kg	
	Zirconium	J	2.92	5.00	PQL	mg/Kg	
SL-182-SA6-SS-0.0-0.5	BORON	J	4.10	4.88	PQL	mg/Kg	J (all detects)
	TIN	J	3.06	9.77	PQL	mg/Kg	
	Zirconium	J	2.20	4.88	PQL	mg/Kg	
SL-183-SA6-SS-0.0-0.5	BORON	J	3.47	4.93	PQL	mg/Kg	J (all detects)
	SODIUM	J	73.3	98.7	PQL	mg/Kg	
	TIN	J	2.99	9.87	PQL	mg/Kg	
	Zirconium	J	3.19	4.93	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-184-SA6-SS-0.0-0.5	BORON	J	4.30	4.89	PQL	mg/Kg	J (all detects)
	SODIUM	J	71.0	97.9	PQL	mg/Kg	
	TIN	J	2.69	9.79	PQL	mg/Kg	
	Zirconium	J	3.34	4.89	PQL	mg/Kg	
SL-293-SA6-SS-0.0-0.5	BORON	J	3.99	5.05	PQL	mg/Kg	J (all detects)
	SODIUM	J	65.0	101	PQL	mg/Kg	
	TIN	J	3.08	10.1	PQL	mg/Kg	
	Zirconium	J	2.85	5.05	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA6-SS-0.0-0.5	ANTIMONY	J	0.168	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.105	0.403	PQL	mg/Kg	
	SILVER	J	0.0793	0.101	PQL	mg/Kg	
SL-128-SA6-SS-0.0-0.5	ANTIMONY	J	0.0946	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.111	0.405	PQL	mg/Kg	
	SILVER	J	0.0624	0.101	PQL	mg/Kg	
SL-133-SA6-SS-0.0-0.5	ANTIMONY	J	0.0925	0.199	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.110	0.399	PQL	mg/Kg	
	SILVER	J	0.0548	0.0996	PQL	mg/Kg	
SL-134-SA6-SS-0.0-0.5	SELENIUM	J	0.131	0.396	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0670	0.0990	PQL	mg/Kg	
SL-142-SA6-SS-0.0-0.5	ANTIMONY	J	0.191	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.111	0.402	PQL	mg/Kg	
	SILVER	J	0.0687	0.101	PQL	mg/Kg	
SL-143-SA6-SS-0.0-0.5	SELENIUM	J	0.139	0.398	PQL	mg/Kg	J (all detects)
SL-145-SA6-SS-0.0-0.5	ANTIMONY	J	0.132	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.129	0.405	PQL	mg/Kg	
	SILVER	J	0.0585	0.101	PQL	mg/Kg	
SL-146-SA6-SS-0.0-0.5	SELENIUM	J	0.128	0.396	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0604	0.0990	PQL	mg/Kg	
SL-147-SA6-SS-0.0-0.5	ANTIMONY	J	0.138	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.122	0.395	PQL	mg/Kg	
	SILVER	J	0.0642	0.0988	PQL	mg/Kg	
SL-148-SA6-SS-0.0-0.5	SELENIUM	J	0.129	0.401	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0808	0.100	PQL	mg/Kg	
SL-150-SA6-SS-0.0-0.5	ANTIMONY	J	0.179	0.194	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.119	0.388	PQL	mg/Kg	
	SILVER	J	0.0588	0.0971	PQL	mg/Kg	
SL-152-SA6-SS-0.0-0.5	ANTIMONY	J	0.165	0.192	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.120	0.385	PQL	mg/Kg	
	SILVER	J	0.0567	0.0962	PQL	mg/Kg	
SL-155-SA6-SS-0.0-0.5	ANTIMONY	J	0.0931	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.128	0.397	PQL	mg/Kg	
	SILVER	J	0.0430	0.0991	PQL	mg/Kg	
SL-176-SA6-SS-0.0-0.5	ANTIMONY	J	0.116	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.116	0.396	PQL	mg/Kg	
	SILVER	J	0.0520	0.0989	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-182-SA6-SS-0.0-0.5	ANTIMONY	J	0.113	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0928	0.402	PQL	mg/Kg	
	SILVER	J	0.0516	0.101	PQL	mg/Kg	
SL-183-SA6-SS-0.0-0.5	ANTIMONY	J	0.102	0.199	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0949	0.399	PQL	mg/Kg	
	SILVER	J	0.0389	0.0997	PQL	mg/Kg	
SL-184-SA6-SS-0.0-0.5	ANTIMONY	J	0.136	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.140	0.399	PQL	mg/Kg	
	SILVER	J	0.0729	0.0998	PQL	mg/Kg	
SL-293-SA6-SS-0.0-0.5	ANTIMONY	J	0.101	0.196	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.174	0.392	PQL	mg/Kg	
	SILVER	J	0.0401	0.0981	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.0	PQL	mg/Kg	J (all detects)
SL-134-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.38	1.0	PQL	mg/Kg	J (all detects)
SL-146-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.55	1.0	PQL	mg/Kg	J (all detects)
SL-150-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.0	PQL	mg/Kg	J (all detects)
SL-152-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.0	PQL	mg/Kg	J (all detects)
SL-155-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.49	1.0	PQL	mg/Kg	J (all detects)
SL-176-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.56	1.0	PQL	mg/Kg	J (all detects)
SL-182-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.49	1.0	PQL	mg/Kg	J (all detects)
SL-183-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA6-SS-0.0-0.5	MERCURY	J	0.0265	0.0970	PQL	mg/Kg	J (all detects)
SL-128-SA6-SS-0.0-0.5	MERCURY	J	0.0111	0.101	PQL	mg/Kg	J (all detects)
SL-133-SA6-SS-0.0-0.5	MERCURY	J	0.0090	0.0946	PQL	mg/Kg	J (all detects)
SL-134-SA6-SS-0.0-0.5	MERCURY	J	0.0376	0.0971	PQL	mg/Kg	J (all detects)
SL-143-SA6-SS-0.0-0.5	MERCURY	J	0.0181	0.0972	PQL	mg/Kg	J (all detects)
SL-145-SA6-SS-0.0-0.5	MERCURY	J	0.0786	0.0951	PQL	mg/Kg	J (all detects)
SL-146-SA6-SS-0.0-0.5	MERCURY	J	0.0475	0.0957	PQL	mg/Kg	J (all detects)
SL-150-SA6-SS-0.0-0.5	MERCURY	J	0.0627	0.100	PQL	mg/Kg	J (all detects)
SL-152-SA6-SS-0.0-0.5	MERCURY	J	0.0092	0.0982	PQL	mg/Kg	J (all detects)
SL-182-SA6-SS-0.0-0.5	MERCURY	J	0.0426	0.0998	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-184-SA6-SS-0.0-0.5	MERCURY	J	0.0127	0.0953	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA6-SS-0.0-0.5	ETHANOL METHANOL	J J	290 340	510 510	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-134-SA6-SS-0.0-0.5	Isopropanol	J	100	510	PQL	ug/Kg	J (all detects)
SL-142-SA6-SS-0.0-0.5	ETHANOL Isopropanol	J J	160 230	510 510	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-143-SA6-SS-0.0-0.5	ETHANOL	J	290	510	PQL	ug/Kg	J (all detects)
SL-147-SA6-SS-0.0-0.5	ETHANOL Isopropanol	J J	180 160	500 500	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-148-SA6-SS-0.0-0.5	ETHANOL Isopropanol	J J	330 140	510 510	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-293-SA6-SS-0.0-0.5	ETHANOL Isopropanol METHANOL	J J J	110 140 450	510 510 510	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA6-SS-0.0-0.5	EFH (C15-C20)	J	5.0	6.0	PQL	mg/Kg	J (all detects)
SL-128-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-133-SA6-SS-0.0-0.5	EFH (C15-C20)	J	3.3	6.1	PQL	mg/Kg	J (all detects)
SL-134-SA6-SS-0.0-0.5	EFH (C15-C20)	J	3.1	6.1	PQL	mg/Kg	J (all detects)
SL-142-SA6-SS-0.0-0.5	EFH (C15-C20)	J	4.5	12	PQL	mg/Kg	J (all detects)
SL-145-SA6-SS-0.0-0.5	EFH (C15-C20)	J	6.3	12	PQL	mg/Kg	J (all detects)
SL-146-SA6-SS-0.0-0.5	EFH (C15-C20)	J	40	60	PQL	mg/Kg	J (all detects)
SL-147-SA6-SS-0.0-0.5	EFH (C15-C20)	J	3.4	6.0	PQL	mg/Kg	J (all detects)
SL-148-SA6-SS-0.0-0.5	EFH (C15-C20)	J	5.0	12	PQL	mg/Kg	J (all detects)
SL-150-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.78	1.2	PQL	mg/Kg	J (all detects)
SL-293-SA6-SS-0.0-0.5	EFH (C8-C11)	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-142-SA6-SS-0.0-0.5	Chlordane gamma-BHC (Lindane)	J J	3.1 0.13	3.4 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-145-SA6-SS-0.0-0.5	Chlordane	J	2.3	3.4	PQL	ug/Kg	J (all detects)
SL-146-SA6-SS-0.0-0.5	Chlordane	J	2.2	3.4	PQL	ug/Kg	J (all detects)
SL-147-SA6-SS-0.0-0.5	Chlordane	J	1.7	3.4	PQL	ug/Kg	J (all detects)
SL-148-SA6-SS-0.0-0.5	Chlordane	J	3.0	3.5	PQL	ug/Kg	J (all detects)
SL-155-SA6-SS-0.0-0.5	HEPTACHLOR	J	0.091	0.17	PQL	ug/Kg	J (all detects)
SL-176-SA6-SS-0.0-0.5	BETA-BHC gamma-BHC (Lindane)	J J	0.093 0.078	0.17 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-183-SA6-SS-0.0-0.5	Chlordane DIELDRIN	J J	1.1 0.12	3.4 0.34	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-293-SA6-SS-0.0-0.5	ALPHA-BHC	J	0.068	0.17	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA6-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.4 3.0	1.7 3.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-133-SA6-SS-0.0-0.5	Aroclor 5460	J	3.1	3.4	PQL	ug/Kg	J (all detects)
SL-148-SA6-SS-0.0-0.5	Aroclor 5460	J	62	67	PQL	ug/Kg	J (all detects)
SL-152-SA6-SS-0.0-0.5	AROCLOR 1260	J	1.1	1.7	PQL	ug/Kg	J (all detects)
SL-176-SA6-SS-0.0-0.5	AROCLOR 1260	J	1.5	1.7	PQL	ug/Kg	J (all detects)
SL-183-SA6-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	0.48 1.7	1.7 3.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-293-SA6-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.4 1.2	1.7 3.3	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-128-SA6-SS-0.0-0.5	DINOSEB	J	0.81	2.4	PQL	ug/Kg	J (all detects)
SL-148-SA6-SS-0.0-0.5	2,4-DB	J	1.1	1.7	PQL	ug/Kg	J (all detects)
SL-152-SA6-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.15	0.17	PQL	ug/Kg	J (all detects)
SL-176-SA6-SS-0.0-0.5	2,4-D	J	1.5	3.6	PQL	ug/Kg	J (all detects)
SL-182-SA6-SS-0.0-0.5	DICAMBA	J	0.55	1.2	PQL	ug/Kg	J (all detects)
SL-183-SA6-SS-0.0-0.5	2,4-DB	J	1.2	1.7	PQL	ug/Kg	J (all detects)
SL-184-SA6-SS-0.0-0.5	2,4-D	J	2.1	3.6	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-134-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	29	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	54	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	63	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	49	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	26	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	39	170	PQL	ug/Kg	
	PHENANTHRENE	J	39	170	PQL	ug/Kg	
	PYRENE	J	61	170	PQL	ug/Kg	
SL-142-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	66	340	PQL	ug/Kg	J (all detects)
SL-145-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	32	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	30	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	33	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	17	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	340	PQL	ug/Kg	
	CHRYSENE	J	27	170	PQL	ug/Kg	
	FLUORANTHENE	J	55	170	PQL	ug/Kg	
	PHENANTHRENE	J	37	170	PQL	ug/Kg	
	PYRENE	J	61	170	PQL	ug/Kg	
SL-146-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	23	170	PQL	ug/Kg	J (all detects)
	PYRENE	J	30	170	PQL	ug/Kg	
SL-147-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	17	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	20	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	23	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	17	170	PQL	ug/Kg	
	CHRYSENE	J	17	170	PQL	ug/Kg	
	FLUORANTHENE	J	19	170	PQL	ug/Kg	
	PYRENE	J	20	170	PQL	ug/Kg	
SL-150-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	340	PQL	ug/Kg	J (all detects)
SL-152-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	88	330	PQL	ug/Kg	J (all detects)
SL-176-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	340	PQL	ug/Kg	J (all detects)
SL-182-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	18	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	34	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	57	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	48	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	21	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	340	PQL	ug/Kg	
	CHRYSENE	J	33	170	PQL	ug/Kg	
	FLUORANTHENE	J	39	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	35	170	PQL	ug/Kg	
	PHENANTHRENE	J	18	170	PQL	ug/Kg	
	PYRENE	J	40	170	PQL	ug/Kg	
SL-183-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	340	PQL	ug/Kg	J (all detects)
SL-184-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	340	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	21	170	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA6-SS-0.0-0.5	ANTHRACENE	J	2.3	8.4	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	6.6	8.4	PQL	ug/Kg	

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

Reporting Limit Outliers

Lab Reporting Batch ID: DE202 **Laboratory: LL**

EDD Filename: DE202_v3. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-128-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	3.9	8.4	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	40	91	PQL	ug/Kg	
	CHRYSENE	J	3.9	8.4	PQL	ug/Kg	
	FLUORANTHENE	J	6.0	8.4	PQL	ug/Kg	
	PYRENE	J	5.2	8.4	PQL	ug/Kg	
SL-133-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	4.2	8.5	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	7.2	8.5	PQL	ug/Kg	
SL-134-SA6-SS-0.0-0.5	ANTHRACENE	J	3.0	8.4	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	4.9	8.4	PQL	ug/Kg	
SL-142-SA6-SS-0.0-0.5	NAPHTHALENE	J	3.6	8.5	PQL	ug/Kg	J (all detects)
SL-143-SA6-SS-0.0-0.5	ANTHRACENE	J	4.8	8.5	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	3.7	8.5	PQL	ug/Kg	
SL-146-SA6-SS-0.0-0.5	ANTHRACENE	J	1.7	8.4	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	7.7	8.4	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	5.5	8.4	PQL	ug/Kg	
	PHENANTHRENE	J	6.4	8.4	PQL	ug/Kg	
SL-148-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	3.5	8.5	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	3.4	8.5	PQL	ug/Kg	
	Di-n-octylphthalate	J	40	92	PQL	ug/Kg	
	FLUORANTHENE	J	4.2	8.5	PQL	ug/Kg	
	PYRENE	J	3.7	8.5	PQL	ug/Kg	
SL-150-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	4.6	8.4	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	4.3	8.4	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	6.7	8.4	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	3.5	8.4	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	3.4	8.4	PQL	ug/Kg	
	CHRYSENE	J	6.7	8.4	PQL	ug/Kg	
SL-155-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	4.2	8.4	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	7.6	8.4	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	3.6	8.4	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	3.6	8.4	PQL	ug/Kg	
	FLUORANTHENE	J	3.4	8.4	PQL	ug/Kg	
SL-176-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	5.0	8.4	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	4.8	8.4	PQL	ug/Kg	
	Di-n-butylphthalate	J	46	91	PQL	ug/Kg	
	FLUORANTHENE	J	5.9	8.4	PQL	ug/Kg	
	PYRENE	J	5.1	8.4	PQL	ug/Kg	
SL-183-SA6-SS-0.0-0.5	CHRYSENE	J	2.0	8.4	PQL	ug/Kg	J (all detects)
SL-184-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.97	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.99	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.85	1.7	PQL	ug/Kg	
	PYRENE	J	1.1	1.7	PQL	ug/Kg	
SL-293-SA6-SS-0.0-0.5	ANTHRACENE	J	0.55	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.4	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	18	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.7	18	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.4	18	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.2	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.7	PQL	ug/Kg	

LDC #: 26407B4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-21-11

SDG #: DE202 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: CR

2nd Reviewer: MG

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

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

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

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

Validated Samples:

1	SL-127-SA6-SS-0.0-0.5	11	SL-150-SA6-SS-0.0-0.5	21	(#1) Dup	31	
2	SL-128-SA6-SS-0.0-0.5	12	SL-152-SA6-SS-0.0-0.5	22		32	
3	SL-133-SA6-SS-0.0-0.5	13	SL-155-SA6-SS-0.0-0.5	23		33	
4	SL-134-SA6-SS-0.0-0.5	14	SL-176-SA6-SS-0.0-0.5	24		34	
5	SL-142-SA6-SS-0.0-0.5	15	SL-182-SA6-SS-0.0-0.5	25		35	
6	SL-143-SA6-SS-0.0-0.5	16	SL-183-SA6-SS-0.0-0.5	26		36	
7	SL-145-SA6-SS-0.0-0.5	17	SL-184-SA6-SS-0.0-0.5	27		37	
8	SL-146-SA6-SS-0.0-0.5	18	SL-293-SA6-SS-0.0-0.5	28		38	
9	SL-147-SA6-SS-0.0-0.5	19	(#1) MS	29		39	
10	SL-148-SA6-SS-0.0-0.5	20	1 MSD	30		40	

Notes:

LDC #: 26407B4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/Kg

Soil preparation factor applied: 100x
Associated Samples: 14-18

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	14	15	18											
Zr	6.1	3.05	2.9	2.2	2.9											

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.

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE202
Matrix: SOIL Level (low/med): LOW

74x

Background Lab Sample ID: 6348152BKG Matrix Spike Lab Sample ID: 6348152MS Matrix Spike Duplicate Lab Sample ID: 6348152MSD
% Solids for Sample: 99.1
Batch Id(s): P20108C, P20126D, P20111C

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		13642.8801		15675.3229		16040.4098		201.8163	197.8592	MG/KG	1007		1212		2			20	P
Antimony	121	0.1682	B	0.6916		0.6625		1.1989	1.1643	MG/KG	44	N	42	N	4		75 - 125	20	MS
Arsenic	75	13.4289		16.5969		16.0619		1.9982	1.9405	MG/KG	159		136		3			20	MS
Barium	137	146.2361		169.7855		166.0134		9.9909	9.7027	MG/KG	236		204		2			20	MS
Beryllium	9	0.7992		1.9716		1.9910		0.7993	0.7762	MG/KG	147	N	154	N	1		75 - 125	20	MS
Boron		5.1963		200.8527		199.3530		201.8163	197.8592	MG/KG	97		98		1		84 - 115	20	P
Cadmium	111	0.5855		2.1081		2.0667		0.9991	0.9703	MG/KG	152	N	153	N	2		75 - 125	20	MS
Calcium		2409.5383		2944.3199		2970.2449		403.6327	395.7183	MG/KG	132		142		1			20	P
Chromium	52	23.3905		36.1071		35.3567		9.9909	9.7027	MG/KG	127	N	123		2		75 - 125	20	MS
Cobalt	59	8.5671		83.9436		81.4445		49.9545	48.5135	MG/KG	151	N	150	N	3		75 - 125	20	MS
Copper	63	12.0464		27.9945		27.5169		9.9909	9.7027	MG/KG	160	N	159	N	2		75 - 125	20	MS
Iron		19639.2592		19546.4571		20201.2287		100.9082	98.9296	MG/KG	-92		568		3			20	P
Lead	208	17.0595		23.2389		24.6837		2.9973	2.9108	MG/KG	206		262		6			20	MS
Lithium		24.3179		123.6448		122.5005		100.9082	98.9296	MG/KG	98		99		1		82 - 114	20	P
Magnesium		4157.9742		4435.1826		4389.2998		201.8163	197.8592	MG/KG	137		117		1			20	P
Manganese		284.1711		338.2240		364.1756		50.4541	49.4648	MG/KG	107		162		7			20	P
Mercury		0.0265	B	0.1956		0.1933		0.1616	0.1652	MG/KG	105		101		1		65 - 135	20	CV
Molybdenum	98	0.8083		16.4810		15.9881		9.9909	9.7027	MG/KG	157	N	156	N	3		75 - 125	20	MS
Nickel	60	18.2119		32.9700		32.3876		9.9909	9.7027	MG/KG	148	N	146	N	2		75 - 125	20	MS
Phosphorus		410.1163		505.3290		498.3677		100.9082	98.9296	MG/KG	94		89		1			20	P
Potassium		3563.0764		4608.2230		4624.7274		1009.0817	989.2958	MG/KG	104		107		0		75 - 125	20	P
Selenium	78	0.1048	B	2.1161		2.1501		1.9982	1.9405	MG/KG	101		105		2		75 - 125	20	MS
Silver	107	0.0793	B	15.6278		15.1906		9.9909	9.7027	MG/KG	156	N	156	N	3		75 - 125	20	MS
Sodium		72.5873	B	1053.6206		1046.7066		1009.0817	989.2958	MG/KG	97		98		1		75 - 125	20	P
Strontium		15.5830		113.4026		113.5009		100.9082	98.9296	MG/KG	97		99		0		75 - 115	20	P
Thallium	203	0.3407		1.0179		0.9910		0.3996	0.3881	MG/KG	169	N	168	N	3		75 - 125	20	MS
Tin		3.3995	B	376.6640		373.3137		403.6327	395.7183	MG/KG	92		93		1		80 - 110	20	P
Titanium		986.9662		1251.8234		1271.4281		100.9082	98.9296	MG/KG	262		288		2			20	P
Vanadium	51	44.6216		60.9246		58.7596		9.9909	9.7027	MG/KG	163		146		4			20	MS
Zinc	66	95.8022		114.6557		112.3962		9.9909	9.7027	MG/KG	189		171		2			20	MS
Zirconium		3.2104	B	97.0232		96.0181		100.9082	98.9296	MG/KG	93		94		1		75 - 125	20	P

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

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

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE202
Matrix: SOIL Level (low/med): LOW

<5x

Background Lab Sample ID: 6348152BKG
% Solids for Duplicate: 99.1
Batch ID(s): P20108C, P20126D, P20111C
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6348152DUP
% Solids for Sample: 99.1

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			13642.8801		13369.2909		2		P
Antimony	121		0.1682	B	0.1342	B	22		MS
Arsenic	75		13.4289		13.6088		1		MS
Barium	137		146.2361		151.5205		4		MS
Beryllium	9		0.7992		0.7938		1		MS
Boron		4.9	5.1963		5.2094		0		P
Cadmium	111		0.5855		0.7075		19		MS
Calcium			2409.5383		2422.6917		1		P
Chromium	52		23.3905		24.1388		3		MS
Cobalt	59		8.5671		8.6643		1		MS
Copper	63		12.0464		13.0073		8		MS
Iron			19639.2592		19876.4855		1		P
Lead	208		17.0595		35.2981		70	*	MS
Lithium			24.3179		23.8269		2		P
Magnesium			4157.9742		4200.7073		1		P
Manganese			284.1711		297.1755		4		P
Mercury			0.0265	B	0.0324	B	20		CV
Molybdenum	98		0.8083		0.7912		2		MS
Nickel	60		18.2119		17.8350		2		MS
Phosphorus			410.1163		403.4959		2		P
Potassium			3563.0764		3506.4707		2		P
Selenium	78		0.1048	B	0.0942	B	11		MS
Silver	107		0.0793	B	0.0749	B	6		MS
Sodium			72.5873	B	70.1360	B	3		P
Strontium			15.5830		15.9833		3		P
Thallium	203	0.1	0.3407		0.3706		8		MS
Tin			3.3995	B	2.9622	B	14		P
Titanium			986.9662		1009.4960		2		P
Vanadium	51		44.6216		47.5851		6		MS
Zinc	66		95.8022		100.0970		4		MS
Zirconium			3.2104	B	3.1282	B	3		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE282 4285

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE202
Matrix: SOIL Level (low/med): LOW

JJS

Background Lab Sample ID: 6348152BKG Serial Dilution Lab Sample ID: 6348152L
Batch ID(s): P20108C, P20126D
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		139256.9700		141649.1500		2		P
Antimony	121	0.8336	B	1.8500	U	100		MS
Arsenic	75	66.5400		51.8000		22	E	MS
Barium	137	724.6000		531.5000		27	E	MS
Beryllium	9	3.9600		3.3775		15		MS
Boron		53.0400		83.3500	B	57		P
Cadmium	111	2.9010		2.0815	B	28		MS
Calcium		24594.8800		25343.6500		3		P
Chromium	52	115.9000		97.4500		16	E	MS
Cobalt	59	42.4500		33.7850		20	E	MS
Copper	63	59.6900		47.2150		21	E	MS
Iron		200463.8100		196391.7000		2		P
Lead	208	84.5300		68.3000		19	E	MS
Lithium		248.2200		273.2500		10		P
Magnesium		42441.6900		43140.8500		2		P
Manganese		2900.6200		3021.8000		4		P
Molybdenum	98	4.0050		3.5260		12		MS
Nickel	60	90.2400		69.2000		23	E	MS
Phosphorus		4186.1800		4233.9000		1		P
Potassium		36369.3900		36236.0000		0		P
Selenium	78	0.5195	B	1.4500	U	100		MS
Silver	107	0.3930	B	0.4481	B	14		MS
Sodium		740.9200	B	769.5500	B	4		P
Strontium		159.0600		167.3500		5		P
Thallium	203	1.6880		1.3340	B	21		MS
Tin		34.7000	B	44.1500	B	27		P
Titanium		10074.2600		10367.0500		3		P
Vanadium	51	221.1000		187.7500		15	E	MS
Zinc	66	474.7000		370.0000		22	E	MS
Zirconium		32.7700	B	43.9000	B	34		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: DE202 4287
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE203

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Jul-2011	TB-071911	6349725	TB	5030B	8015M	III
19-Jul-2011	TB-071911	6349725	TB	5030B	8260B	III
19-Jul-2011	TB-071911	6349725	TB	5030B	8260B SIM	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	3050B	6010B	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	3050B	6020	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	3060A	7199	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	3550B	8081A	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	3550B	8082	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	3550B	8151A	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	3550B	8270C	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	3550B	8270C SIM	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	METHOD	300.0	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	METHOD	314.0	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5	6349720	N	METHOD	7471A	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5DUP	P349720D271035B	DUP	METHOD	300.0	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5DUP	P349720D272005B	DUP	METHOD	314.0	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5MS	P349720R271049B	MS	METHOD	300.0	III
19-Jul-2011	SL-301-SA6-SS-0.0-0.5MS	P349720R272051B	MS	METHOD	314.0	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	3050B	6010B	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	3050B	6020	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	3060A	7199	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	3550B	8081A	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	3550B	8082	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	3550B	8151A	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	3550B	8270C	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	3550B	8270C SIM	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	METHOD	300.0	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	METHOD	314.0	III
19-Jul-2011	SL-174-SA6-SS-0.0-0.5	6349717	N	METHOD	7471A	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	3050B	6010B	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	3050B	6020	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	3060A	7199	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	3550B	8081A	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	3550B	8082	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	3550B	8151A	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	3550B	8270C	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	3550B	8270C SIM	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	METHOD	300.0	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	METHOD	314.0	III
19-Jul-2011	SL-178-SA6-SS-0.0-0.5	6349718	N	METHOD	7471A	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	3050B	6010B	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	3050B	6020	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	3060A	7199	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	3550B	8081A	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	3550B	8082	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	3550B	8151A	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	3550B	8270C	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	3550B	8270C SIM	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	METHOD	300.0	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	METHOD	314.0	III
19-Jul-2011	SL-185-SA6-SS-0.0-0.5	6349719	N	METHOD	7471A	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	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
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	3050B	6020	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	3060A	7199	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	3550B	8015B	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	3550B	8015M	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	3550B	8082	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	3550B	8270C	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	3550B	8270C SIM	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	5035	8015M	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	5035	8260B	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	5035	8260B SIM	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	METHOD	300.0	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	METHOD	314.0	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	METHOD	6850	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	METHOD	7471A	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	METHOD	8015B	III
19-Jul-2011	SL-084-SA6-SB-4.0-5.0	6349721	N	METHOD	8015M	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	3050B	6010B	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	3050B	6020	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	3060A	7199	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	3550B	8081A	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	3550B	8082	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	3550B	8151A	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	3550B	8270C	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	3550B	8270C SIM	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	METHOD	300.0	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	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
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	METHOD	6850	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5	6349710	N	METHOD	7471A	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5DUP	P349710D270716A	DUP	METHOD	300.0	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5DUP	P349710D271505A	DUP	METHOD	314.0	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MSD	P349710M240817A	MSD	3550B	8151A	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MSD	P349710M241930A	MSD	3550B	8081A	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MSD	P349710M260003	MSD	3550B	8270C	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MSD	P349710M260543	MSD	3550B	8270C SIM	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MS	P349710R240749A	MS	3550B	8151A	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MS	P349710R241915A	MS	3550B	8081A	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MS	P349710R260511	MS	3550B	8270C SIM	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MS	P349710R262338	MS	3550B	8270C	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MS	P349710R270730A	MS	METHOD	300.0	III
19-Jul-2011	SL-151-SA6-SS-0.0-0.5MS	P349710R271528A	MS	METHOD	314.0	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	3050B	6010B	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	3050B	6020	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	3060A	7199	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	3550B	8015B	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	3550B	8015M	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	3550B	8082	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	3550B	8270C	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	3550B	8270C SIM	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	5035	8015M	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	METHOD	300.0	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	METHOD	314.0	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	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
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	METHOD	8015B	III
19-Jul-2011	SL-084-SA6-SB-9.0-10.0	6349722	N	METHOD	8015M	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	3050B	6010B	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	3050B	6020	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	3060A	7199	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	3550B	8081A	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	3550B	8082	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	3550B	8151A	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	3550B	8270C	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	3550B	8270C SIM	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	METHOD	300.0	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	METHOD	314.0	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5	6349711	N	METHOD	7471A	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5MSD	P349711M240214A	MSD	3550B	8082	III
19-Jul-2011	SL-154-SA6-SS-0.0-0.5MS	P349711R240156A	MS	3550B	8082	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	3050B	6010B	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	3050B	6020	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	3060A	7199	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	3550B	8015B	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	3550B	8015M	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	3550B	8082	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	3550B	8270C	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	3550B	8270C SIM	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	5035	8015M	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	5035	8260B	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	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
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	METHOD	300.0	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	METHOD	314.0	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	METHOD	7471A	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	METHOD	8015B	III
19-Jul-2011	SL-085-SA6-SB-4.0-5.0	6349723	N	METHOD	8015M	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	3050B	6010B	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	3050B	6020	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	3060A	7199	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	3550B	8081A	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	3550B	8082	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	3550B	8151A	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	3550B	8270C	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	3550B	8270C SIM	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	METHOD	300.0	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	METHOD	314.0	III
19-Jul-2011	SL-172-SA6-SS-0.0-0.5	6349716	N	METHOD	7471A	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	3050B	6010B	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	3050B	6020	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	3060A	7199	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	3550B	8015B	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	3550B	8015M	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	3550B	8082	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	3550B	8270C	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	3550B	8270C SIM	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	5035	8015M	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	METHOD	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
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	METHOD	314.0	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	METHOD	7471A	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	METHOD	8015B	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0	6349724	N	METHOD	8015M	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0DUP	P349724D272244A	DUP	3060A	7199	III
19-Jul-2011	SL-085-SA6-SB-7.0-8.0MS	P349724R272153A	MS	3060A	7199	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3005A	6010B	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3020A	6020	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3510C	8015B	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3510C	8015M	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3510C	8081A	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3510C	8082	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3510C	8270C	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3510C	8270C SIM	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	3520C	1625C	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	8330	8330A	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	Gen Prep	300.0	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	Gen Prep	314.0	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	Gen Prep	7199	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	Gen Prep	8015B	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	Gen Prep	8015M	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	METHOD	7470A	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	METHOD	8151A	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	METHOD	8315A	III
19-Jul-2011	EB-SA6-SS-071911	6349726	EB	METHOD	9012B	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	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
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3050B	6020	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3060A	7199	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3550B	8015B	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3550B	8015M	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3550B	8081A	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3550B	8082	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3550B	8151A	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3550B	8270C	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	3550B	8270C SIM	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	METHOD	300.0	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	METHOD	314.0	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	METHOD	7471A	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	METHOD	8015B	III
19-Jul-2011	SL-168-SA6-SS-0.0-0.5	6349713	N	METHOD	8015M	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3050B	6010B	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3050B	6020	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3060A	7199	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3550B	8015B	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3550B	8015M	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3550B	8081A	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3550B	8082	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3550B	8151A	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3550B	8270C	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	3550B	8270C SIM	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	METHOD	300.0	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	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
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	METHOD	7471A	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	METHOD	8015B	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5	6349714	N	METHOD	8015M	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5DUP	P349714D221555	DUP	METHOD	7471A	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5MSD	P349714M221558	MSD	METHOD	7471A	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5MSD	P349714M321614A	MSD	3550B	8015M	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5MS	P349714R221557	MS	METHOD	7471A	III
19-Jul-2011	SL-169-SA6-SS-0.0-0.5MS	P349714R321550A	MS	3550B	8015M	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3050B	6010B	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3050B	6020	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3060A	7199	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3550B	8015B	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3550B	8015M	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3550B	8081A	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3550B	8082	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3550B	8151A	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3550B	8270C	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	3550B	8270C SIM	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	METHOD	300.0	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	METHOD	314.0	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	METHOD	7471A	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	METHOD	8015B	III
19-Jul-2011	SL-171-SA6-SS-0.0-0.5	6349715	N	METHOD	8015M	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3050B	6010B	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3060A	7199	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3550B	8015B	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3550B	8015M	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3550B	8081A	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3550B	8082	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3550B	8151A	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3550B	8270C	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	3550B	8270C SIM	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	METHOD	300.0	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	METHOD	314.0	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	METHOD	7471A	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	METHOD	8015B	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5	6349712	N	METHOD	8015M	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5DUP	P349712D221043	DUP	3050B	6010B	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5DUP	P349712D221403A	DUP	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5DUP	P349712D221403B	DUP	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5DUP	P349712D221403C	DUP	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5DUP	P349712D221403D	DUP	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MSD	P349712M221047	MSD	3050B	6010B	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MSD	P349712M221409A	MSD	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MSD	P349712M221409B	MSD	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MSD	P349712M221409C	MSD	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MSD	P349712M221409D	MSD	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MSD	P349712M321217A	MSD	3550B	8015B	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MS	P349712R221047	MS	3050B	6010B	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MS	P349712R221406A	MS	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MS	P349712R221406B	MS	3050B	6020	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MS	P349712R221406C	MS	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MS	P349712R221406D	MS	3050B	6020	III
19-Jul-2011	SL-166-SA6-SS-0.0-0.5MS	P349712R321132A	MS	3550B	8015B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-084-SA6-SB-4.0-5.0 **Collected:** 7/19/2011 9:35:00 **Analysis Type:** RES **Dilution:** 1

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

Sample ID: SL-084-SA6-SB-9.0-10.0 **Collected:** 7/19/2011 9:45:00 **Analysis Type:** RES **Dilution:** 1

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

Sample ID: SL-085-SA6-SB-4.0-5.0 **Collected:** 7/19/2011 11:10:00 **Analysis Type:** RES **Dilution:** 1

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

Sample ID: SL-085-SA6-SB-7.0-8.0 **Collected:** 7/19/2011 11:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-151-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 9:36:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-154-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 10:08:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-166-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 3:09:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-168-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 1:02:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.79	MDL	0.99	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-169-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 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
FLUORIDE	1.5		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-171-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 2:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-172-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 11:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-174-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.81	U	0.81	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-178-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.82	U	0.82	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-185-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.85	U	0.85	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-301-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:01:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

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

Sample ID: EB-SA6-SS-071911 *Collected:* 7/19/2011 1:00:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0038	J	0.0022	MDL	0.0500	PQL	mg/L	U	B
STRONTIUM	0.00037	J	0.00022	MDL	0.0050	PQL	mg/L	U	B

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

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000		6.49	MDL	21.5	PQL	mg/Kg	J	E
MAGNESIUM	5020		0.472	MDL	10.7	PQL	mg/Kg	J	E
MANGANESE	299		0.0386	MDL	0.536	PQL	mg/Kg	J	E
POTASSIUM	2670		12.1	MDL	53.6	PQL	mg/Kg	J	E
TIN	3.69	J	0.343	MDL	10.7	PQL	mg/Kg	U	B
TITANIUM	1010		0.0762	MDL	1.07	PQL	mg/Kg	J	E

Sample ID: SL-084-SA6-SB-9.0-10.0 *Collected:* 7/19/2011 9:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11800		6.51	MDL	21.5	PQL	mg/Kg	J	E
BORON	2.55	J	0.387	MDL	5.38	PQL	mg/Kg	J	Z
MAGNESIUM	4490		0.473	MDL	10.8	PQL	mg/Kg	J	E
MANGANESE	328		0.0387	MDL	0.538	PQL	mg/Kg	J	E
POTASSIUM	1970		12.2	MDL	53.8	PQL	mg/Kg	J	E
TIN	3.52	J	0.344	MDL	10.8	PQL	mg/Kg	U	B
TITANIUM	933		0.0763	MDL	1.08	PQL	mg/Kg	J	E

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14400		6.52	MDL	21.5	PQL	mg/Kg	J	E
BORON	4.93	J	0.388	MDL	5.39	PQL	mg/Kg	J	Z
MAGNESIUM	5310		0.474	MDL	10.8	PQL	mg/Kg	J	E
MANGANESE	329		0.0388	MDL	0.539	PQL	mg/Kg	J	E
POTASSIUM	2580		12.2	MDL	53.9	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.16	J	0.345	MDL	10.8	PQL	mg/Kg	U	B
TITANIUM	1250		0.0765	MDL	1.08	PQL	mg/Kg	J	E
Zirconium	4.25	J	0.496	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA6-SB-7.0-8.0 *Collected:* 7/19/2011 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
ALUMINUM	12800		6.33	MDL	20.9	PQL	mg/Kg	J	E
BORON	4.22	J	0.377	MDL	5.23	PQL	mg/Kg	J	Z
MAGNESIUM	8630		0.460	MDL	10.5	PQL	mg/Kg	J	E
MANGANESE	368		0.0377	MDL	0.523	PQL	mg/Kg	J	E
POTASSIUM	4220		11.8	MDL	52.3	PQL	mg/Kg	J	E
TIN	3.33	J	0.335	MDL	10.5	PQL	mg/Kg	U	B
TITANIUM	1520		0.0743	MDL	1.05	PQL	mg/Kg	J	E
Zirconium	3.72	J	0.481	MDL	5.23	PQL	mg/Kg	U	B

Sample ID: SL-151-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.08	J	0.356	MDL	4.95	PQL	mg/Kg	J	Z
SODIUM	52.9	J	5.89	MDL	99.0	PQL	mg/Kg	J	Z
TIN	2.96	J	0.317	MDL	9.90	PQL	mg/Kg	U	B
Zirconium	2.97	J	0.455	MDL	4.95	PQL	mg/Kg	U	B

Sample ID: SL-154-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.02	J	0.360	MDL	5.00	PQL	mg/Kg	J	Z
SODIUM	79.0	J	5.95	MDL	99.9	PQL	mg/Kg	J	Z
TIN	3.08	J	0.320	MDL	9.99	PQL	mg/Kg	U	B
Zirconium	2.59	J	0.460	MDL	5.00	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-166-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 3:09:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15400		5.99	MDL	19.8	PQL	mg/Kg	J	E
MAGNESIUM	6140		0.435	MDL	9.89	PQL	mg/Kg	J	E
MANGANESE	371		0.0356	MDL	0.495	PQL	mg/Kg	J	E
POTASSIUM	4090		11.2	MDL	49.5	PQL	mg/Kg	J	E
TIN	3.32	J	0.317	MDL	9.89	PQL	mg/Kg	U	B
TITANIUM	1330		0.0703	MDL	0.989	PQL	mg/Kg	J	E
Zirconium	3.85	J	0.455	MDL	4.95	PQL	mg/Kg	U	B

Sample ID: SL-168-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 1:02:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000		6.03	MDL	19.9	PQL	mg/Kg	J	E
BORON	4.90	J	0.359	MDL	4.99	PQL	mg/Kg	J	Z
MAGNESIUM	4460		0.439	MDL	9.97	PQL	mg/Kg	J	E
MANGANESE	302		0.0359	MDL	0.499	PQL	mg/Kg	J	E
POTASSIUM	3400		11.3	MDL	49.9	PQL	mg/Kg	J	E
SODIUM	94.6	J	5.94	MDL	99.7	PQL	mg/Kg	J	Z
TIN	2.88	J	0.319	MDL	9.97	PQL	mg/Kg	U	B
TITANIUM	1060		0.0708	MDL	0.997	PQL	mg/Kg	J	E
Zirconium	3.49	J	0.459	MDL	4.99	PQL	mg/Kg	U	B

Sample ID: SL-169-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 1:27:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13300		6.05	MDL	20.0	PQL	mg/Kg	J	E
BORON	4.90	J	0.360	MDL	5.00	PQL	mg/Kg	J	Z
MAGNESIUM	4780		0.440	MDL	10.0	PQL	mg/Kg	J	E
MANGANESE	317		0.0360	MDL	0.500	PQL	mg/Kg	J	E
POTASSIUM	3340		11.3	MDL	50.0	PQL	mg/Kg	J	E
SODIUM	72.1	J	5.95	MDL	100	PQL	mg/Kg	J	Z
TIN	2.99	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
TITANIUM	1130		0.0710	MDL	1.00	PQL	mg/Kg	J	E
Zirconium	3.37	J	0.460	MDL	5.00	PQL	mg/Kg	U	B, B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-171-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 2:21:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14600		6.07	MDL	20.1	PQL	mg/Kg	J	E
MAGNESIUM	5870		0.441	MDL	10.0	PQL	mg/Kg	J	E
MANGANESE	406		0.0361	MDL	0.502	PQL	mg/Kg	J	E
POTASSIUM	4560		11.3	MDL	50.2	PQL	mg/Kg	J	E
TIN	3.30	J	0.321	MDL	10.0	PQL	mg/Kg	U	B
TITANIUM	1330		0.0712	MDL	1.00	PQL	mg/Kg	J	E
Zirconium	4.51	J	0.461	MDL	5.02	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
ALUMINUM	16900		6.58	MDL	21.8	PQL	mg/Kg	J	E
BORON	4.64	J	0.392	MDL	5.44	PQL	mg/Kg	J	Z
MAGNESIUM	5420		0.479	MDL	10.9	PQL	mg/Kg	J	E
MANGANESE	313		0.0392	MDL	0.544	PQL	mg/Kg	J	E
POTASSIUM	3140		12.3	MDL	54.4	PQL	mg/Kg	J	E
SODIUM	97.7	J	6.47	MDL	109	PQL	mg/Kg	J	Z
TIN	3.37	J	0.348	MDL	10.9	PQL	mg/Kg	U	B
TITANIUM	1290		0.0773	MDL	1.09	PQL	mg/Kg	J	E
Zirconium	4.16	J	0.501	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 8:16:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15500		5.93	MDL	19.6	PQL	mg/Kg	J	E
MAGNESIUM	5120		0.431	MDL	9.81	PQL	mg/Kg	J	E
MANGANESE	327		0.0353	MDL	0.490	PQL	mg/Kg	J	E
POTASSIUM	3650		11.1	MDL	49.0	PQL	mg/Kg	J	E
SODIUM	79.4	J	5.84	MDL	98.1	PQL	mg/Kg	J	Z
TIN	3.16	J	0.314	MDL	9.81	PQL	mg/Kg	U	B
TITANIUM	1160		0.0696	MDL	0.981	PQL	mg/Kg	J	E
Zirconium	3.56	J	0.451	MDL	4.90	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-178-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 8:40:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12600		5.93	MDL	19.6	PQL	mg/Kg	J	E
BORON	4.09	J	0.353	MDL	4.90	PQL	mg/Kg	J	Z
MAGNESIUM	4160		0.431	MDL	9.80	PQL	mg/Kg	J	E
MANGANESE	261		0.0353	MDL	0.490	PQL	mg/Kg	J	E
POTASSIUM	2990		11.1	MDL	49.0	PQL	mg/Kg	J	E
SODIUM	85.2	J	5.83	MDL	98.0	PQL	mg/Kg	J	Z
TIN	3.16	J	0.314	MDL	9.80	PQL	mg/Kg	U	B
TITANIUM	1070		0.0696	MDL	0.980	PQL	mg/Kg	J	E
Zirconium	2.92	J	0.451	MDL	4.90	PQL	mg/Kg	U	B, B

Sample ID: SL-185-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 9:21:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11500		6.33	MDL	20.9	PQL	mg/Kg	J	E
BORON	3.98	J	0.377	MDL	5.23	PQL	mg/Kg	J	Z
MAGNESIUM	4900		0.460	MDL	10.5	PQL	mg/Kg	J	E
MANGANESE	286		0.0377	MDL	0.523	PQL	mg/Kg	J	E
POTASSIUM	3000		11.8	MDL	52.3	PQL	mg/Kg	J	E
SODIUM	76.5	J	6.22	MDL	105	PQL	mg/Kg	J	Z
TIN	3.10	J	0.335	MDL	10.5	PQL	mg/Kg	U	B
TITANIUM	1100		0.0743	MDL	1.05	PQL	mg/Kg	J	E
Zirconium	3.41	J	0.481	MDL	5.23	PQL	mg/Kg	U	B, B

Sample ID: SL-301-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 8:01:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13800		5.92	MDL	19.6	PQL	mg/Kg	J	E
MAGNESIUM	4340		0.430	MDL	9.78	PQL	mg/Kg	J	E
MANGANESE	338		0.0352	MDL	0.489	PQL	mg/Kg	J	E
POTASSIUM	4050		11.1	MDL	48.9	PQL	mg/Kg	J	E
SODIUM	62.2	J	5.82	MDL	97.8	PQL	mg/Kg	J	Z
TIN	3.25	J	0.313	MDL	9.78	PQL	mg/Kg	U	B
TITANIUM	1030		0.0694	MDL	0.978	PQL	mg/Kg	J	E
Zirconium	3.63	J	0.450	MDL	4.89	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.585		0.0778	MDL	0.210	PQL	mg/Kg	J	Q, E
ARSENIC	44.9		0.0841	MDL	0.421	PQL	mg/Kg	J	E, A
BERYLLIUM	0.537		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.302		0.0463	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	22.5		0.126	MDL	0.421	PQL	mg/Kg	J	Q, A
COBALT	54.0		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E, A
COPPER	75.8		0.0841	MDL	0.421	PQL	mg/Kg	J	Q, E, E, A
LEAD	8.19		0.0107	MDL	0.210	PQL	mg/Kg	J	E, A
NICKEL	14.1		0.105	MDL	0.421	PQL	mg/Kg	J	Q, E, A
SILVER	0.102	J	0.0149	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.185		0.0316	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	40.9		0.0231	MDL	0.105	PQL	mg/Kg	J	E, A
ZINC	74.5		0.589	MDL	3.16	PQL	mg/Kg	J	E, A

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.236	J	0.0610	MDL	0.421	PQL	mg/Kg	J	Z, Q

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	3.05		0.0526	MDL	0.105	PQL	mg/Kg	J	Q, E

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	94.7		0.111	MDL	0.421	PQL	mg/Kg	J	E, A

Sample ID: SL-084-SA6-SB-9.0-10.0 *Collected:* 7/19/2011 9:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.22		0.0765	MDL	0.207	PQL	mg/Kg	J	Q, E
ARSENIC	44.1		0.0827	MDL	0.414	PQL	mg/Kg	J	E, A
BERYLLIUM	0.623		0.0165	MDL	0.103	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-084-SA6-SB-9.0-10.0 ***Collected:*** 7/19/2011 9:45:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.269		0.0455	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	27.0		0.124	MDL	0.414	PQL	mg/Kg	J	Q, A
COBALT	60.8		0.0207	MDL	0.103	PQL	mg/Kg	J	Q, E, A
COPPER	65.7		0.0827	MDL	0.414	PQL	mg/Kg	J	Q, E, E, A
LEAD	11.8		0.0105	MDL	0.207	PQL	mg/Kg	J	E, A
NICKEL	17.8		0.103	MDL	0.414	PQL	mg/Kg	J	Q, E, A
SILVER	0.0927	J	0.0147	MDL	0.103	PQL	mg/Kg	J	Z, Q
THALLIUM	0.227		0.0310	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	49.4		0.0227	MDL	0.103	PQL	mg/Kg	J	E, A
ZINC	95.4		0.579	MDL	3.10	PQL	mg/Kg	J	E, A

Sample ID: SL-084-SA6-SB-9.0-10.0 ***Collected:*** 7/19/2011 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
SELENIUM	0.170	J	0.0600	MDL	0.414	PQL	mg/Kg	J	Z, Q

Sample ID: SL-084-SA6-SB-9.0-10.0 ***Collected:*** 7/19/2011 9:45:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.76		0.0517	MDL	0.103	PQL	mg/Kg	J	Q, E

Sample ID: SL-084-SA6-SB-9.0-10.0 ***Collected:*** 7/19/2011 9:45:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.110	MDL	0.414	PQL	mg/Kg	J	E, A

Sample ID: SL-085-SA6-SB-4.0-5.0 ***Collected:*** 7/19/2011 11:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.206	J	0.0782	MDL	0.211	PQL	mg/Kg	J	Z, Q, E
ARSENIC	10.8		0.0845	MDL	0.423	PQL	mg/Kg	J	E, A
BERYLLIUM	0.667		0.0169	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.159		0.0465	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	22.7		0.127	MDL	0.423	PQL	mg/Kg	J	Q, A
COBALT	13.1		0.0211	MDL	0.106	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	14.0		0.0845	MDL	0.423	PQL	mg/Kg	J	Q, E, E, A
LEAD	8.15		0.0108	MDL	0.211	PQL	mg/Kg	J	E, A
NICKEL	16.0		0.106	MDL	0.423	PQL	mg/Kg	J	Q, E, A
SILVER	0.0432	J	0.0150	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.300		0.0317	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	46.7		0.0232	MDL	0.106	PQL	mg/Kg	J	E, A
ZINC	70.6		0.592	MDL	3.17	PQL	mg/Kg	J	E, A

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.103	J	0.0613	MDL	0.423	PQL	mg/Kg	J	Z, Q

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.69		0.0528	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.6		0.112	MDL	0.423	PQL	mg/Kg	J	E, A

Sample ID: SL-085-SA6-SB-7.0-8.0 *Collected:* 7/19/2011 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
ANTIMONY	0.0956	J	0.0797	MDL	0.215	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.52		0.0862	MDL	0.431	PQL	mg/Kg	J	E, A
BERYLLIUM	0.598		0.0172	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.117		0.0474	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	28.3		0.129	MDL	0.431	PQL	mg/Kg	J	Q, A
COBALT	8.99		0.0215	MDL	0.108	PQL	mg/Kg	J	Q, E, A
COPPER	13.5		0.0862	MDL	0.431	PQL	mg/Kg	J	Q, E, E, A
LEAD	5.27		0.0110	MDL	0.215	PQL	mg/Kg	J	E, A
NICKEL	20.2		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-085-SA6-SB-7.0-8.0 *Collected:* 7/19/2011 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
SILVER	0.0414	J	0.0153	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.365		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	54.5		0.0237	MDL	0.108	PQL	mg/Kg	J	E, A
ZINC	85.5		0.603	MDL	3.23	PQL	mg/Kg	J	E, A

Sample ID: SL-085-SA6-SB-7.0-8.0 *Collected:* 7/19/2011 11:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0940	J	0.0625	MDL	0.431	PQL	mg/Kg	J	Z, Q

Sample ID: SL-085-SA6-SB-7.0-8.0 *Collected:* 7/19/2011 11:20:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.564		0.0539	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-085-SA6-SB-7.0-8.0 *Collected:* 7/19/2011 11:20:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	134		0.114	MDL	0.431	PQL	mg/Kg	J	E, A

Sample ID: SL-151-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:36:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:36:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.689		0.0495	MDL	0.0990	PQL	mg/Kg	J	Q

Sample ID: SL-151-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:36:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.105	MDL	0.396	PQL	mg/Kg	J	A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-151-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 9:36:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.124	J	0.0733	MDL	0.198	PQL	mg/Kg	J	Z, Q
ARSENIC	3.75		0.0792	MDL	0.396	PQL	mg/Kg	J	A
BERYLLIUM	0.553		0.0158	MDL	0.0990	PQL	mg/Kg	J	Q
CADMIUM	0.355		0.0436	MDL	0.0990	PQL	mg/Kg	J	Q
CHROMIUM	18.0		0.119	MDL	0.396	PQL	mg/Kg	J	Q, A
COBALT	5.77		0.0198	MDL	0.0990	PQL	mg/Kg	J	Q, A
COPPER	12.4		0.0792	MDL	0.396	PQL	mg/Kg	J	Q, A
LEAD	15.5		0.0101	MDL	0.198	PQL	mg/Kg	J	E, A
NICKEL	13.3		0.0990	MDL	0.396	PQL	mg/Kg	J	Q, A
SILVER	0.0503	J	0.0141	MDL	0.0990	PQL	mg/Kg	J	Z, Q
THALLIUM	0.256		0.0297	MDL	0.0990	PQL	mg/Kg	J	Q
VANADIUM	32.1		0.0218	MDL	0.0990	PQL	mg/Kg	J	A
ZINC	124		0.555	MDL	2.97	PQL	mg/Kg	J	A

Sample ID: SL-154-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 10:08:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0568	MDL	0.392	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 10:08:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.822		0.0490	MDL	0.0980	PQL	mg/Kg	J	Q

Sample ID: SL-154-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 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
BARIUM	146		0.104	MDL	0.392	PQL	mg/Kg	J	A

Sample ID: SL-154-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 10:08:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0725	MDL	0.196	PQL	mg/Kg	J	Z, Q
ARSENIC	6.15		0.0784	MDL	0.392	PQL	mg/Kg	J	A
BERYLLIUM	0.855		0.0157	MDL	0.0980	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-154-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 10:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.254		0.0431	MDL	0.0980	PQL	mg/Kg	J	Q
CHROMIUM	23.9		0.118	MDL	0.392	PQL	mg/Kg	J	Q, A
COBALT	8.52		0.0196	MDL	0.0980	PQL	mg/Kg	J	Q, A
COPPER	14.7		0.0784	MDL	0.392	PQL	mg/Kg	J	Q, A
LEAD	13.4		0.010	MDL	0.196	PQL	mg/Kg	J	E, A
NICKEL	16.5		0.0980	MDL	0.392	PQL	mg/Kg	J	Q, A
SILVER	0.0952	J	0.0139	MDL	0.0980	PQL	mg/Kg	J	Z, Q
THALLIUM	0.337		0.0294	MDL	0.0980	PQL	mg/Kg	J	Q
VANADIUM	46.2		0.0216	MDL	0.0980	PQL	mg/Kg	J	A
ZINC	133		0.549	MDL	2.94	PQL	mg/Kg	J	A

Sample ID: SL-166-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 3:09:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0747	MDL	0.202	PQL	mg/Kg	J	Z, Q, E
ARSENIC	10.1		0.0807	MDL	0.404	PQL	mg/Kg	J	E, A
BERYLLIUM	0.865		0.0161	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	0.205		0.0444	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	31.0		0.121	MDL	0.404	PQL	mg/Kg	J	Q, A
COBALT	12.9		0.0202	MDL	0.101	PQL	mg/Kg	J	Q, E, A
COPPER	25.8		0.0807	MDL	0.404	PQL	mg/Kg	J	Q, E, E, A
LEAD	12.0		0.0103	MDL	0.202	PQL	mg/Kg	J	E, A
NICKEL	23.5		0.101	MDL	0.404	PQL	mg/Kg	J	Q, E, A
SILVER	0.0717	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.415		0.0303	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	59.0		0.0222	MDL	0.101	PQL	mg/Kg	J	E, A
ZINC	113		0.565	MDL	3.03	PQL	mg/Kg	J	E, A

Sample ID: SL-166-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 3:09:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.194	J	0.0585	MDL	0.404	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-166-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 3:09:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.815		0.0505	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-166-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 3:09:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	156		0.107	MDL	0.404	PQL	mg/Kg	J	E, A

Sample ID: SL-168-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:02:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.148	J	0.0731	MDL	0.198	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.15		0.0790	MDL	0.395	PQL	mg/Kg	J	E, A
BERYLLIUM	0.616		0.0158	MDL	0.0988	PQL	mg/Kg	J	Q, E
CADMIUM	0.292		0.0435	MDL	0.0988	PQL	mg/Kg	J	Q
CHROMIUM	23.9		0.119	MDL	0.395	PQL	mg/Kg	J	Q, A
COBALT	7.45		0.0198	MDL	0.0988	PQL	mg/Kg	J	Q, E, A
COPPER	12.9		0.0790	MDL	0.395	PQL	mg/Kg	J	Q, E, E, A
LEAD	16.8		0.0101	MDL	0.198	PQL	mg/Kg	J	E, A
NICKEL	17.9		0.0988	MDL	0.395	PQL	mg/Kg	J	Q, E, A
SILVER	0.0482	J	0.0140	MDL	0.0988	PQL	mg/Kg	J	Z, Q
THALLIUM	0.304		0.0296	MDL	0.0988	PQL	mg/Kg	J	Q
VANADIUM	44.9		0.0217	MDL	0.0988	PQL	mg/Kg	J	E, A
ZINC	93.3		0.553	MDL	2.96	PQL	mg/Kg	J	E, A

Sample ID: SL-168-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:02:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0573	MDL	0.395	PQL	mg/Kg	J	Z, Q

Sample ID: SL-168-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:02:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.797		0.0494	MDL	0.0988	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-168-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:02:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.105	MDL	0.395	PQL	mg/Kg	J	E, A

Sample ID: SL-169-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 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
ANTIMONY	0.213		0.0726	MDL	0.196	PQL	mg/Kg	J	Q, E
ARSENIC	4.80		0.0784	MDL	0.392	PQL	mg/Kg	J	E, A
BERYLLIUM	0.614		0.0157	MDL	0.0980	PQL	mg/Kg	J	Q, E
CADMIUM	0.472		0.0431	MDL	0.0980	PQL	mg/Kg	J	Q
CHROMIUM	21.5		0.118	MDL	0.392	PQL	mg/Kg	J	Q, A
COBALT	7.21		0.0196	MDL	0.0980	PQL	mg/Kg	J	Q, E, A
COPPER	13.9		0.0784	MDL	0.392	PQL	mg/Kg	J	Q, E, E, A
LEAD	37.7		0.0100	MDL	0.196	PQL	mg/Kg	J	E, A
NICKEL	15.2		0.0980	MDL	0.392	PQL	mg/Kg	J	Q, E, A
SILVER	0.0516	J	0.0139	MDL	0.0980	PQL	mg/Kg	J	Z, Q
THALLIUM	0.283		0.0294	MDL	0.0980	PQL	mg/Kg	J	Q
VANADIUM	40.3		0.0216	MDL	0.0980	PQL	mg/Kg	J	E, A
ZINC	134		0.549	MDL	2.94	PQL	mg/Kg	J	E, A

Sample ID: SL-169-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:27:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.0569	MDL	0.392	PQL	mg/Kg	J	Z, Q

Sample ID: SL-169-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:27:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.723		0.0490	MDL	0.0980	PQL	mg/Kg	J	Q, E

Sample ID: SL-169-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:27:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.104	MDL	0.392	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-171-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 2:21:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.380		0.0721	MDL	0.195	PQL	mg/Kg	J	Q, E
ARSENIC	3.69		0.0779	MDL	0.390	PQL	mg/Kg	J	E, A
BERYLLIUM	0.452		0.0156	MDL	0.0974	PQL	mg/Kg	J	Q, E
CADMIUM	0.161		0.0429	MDL	0.0974	PQL	mg/Kg	J	Q
CHROMIUM	19.2		0.117	MDL	0.390	PQL	mg/Kg	J	Q, A
COBALT	6.36		0.0195	MDL	0.0974	PQL	mg/Kg	J	Q, E, A
COPPER	11.6		0.0779	MDL	0.390	PQL	mg/Kg	J	Q, E, E, A
LEAD	6.81		0.0099	MDL	0.195	PQL	mg/Kg	J	E, A
NICKEL	12.8		0.0974	MDL	0.390	PQL	mg/Kg	J	Q, E, A
SILVER	0.0238	J	0.0138	MDL	0.0974	PQL	mg/Kg	J	Z, Q
THALLIUM	0.245		0.0292	MDL	0.0974	PQL	mg/Kg	J	Q
VANADIUM	35.9		0.0214	MDL	0.0974	PQL	mg/Kg	J	E, A
ZINC	63.2		0.546	MDL	2.92	PQL	mg/Kg	J	E, A

Sample ID: SL-171-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 2:21:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0565	MDL	0.390	PQL	mg/Kg	J	Z, Q

Sample ID: SL-171-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 2:21:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.434		0.0487	MDL	0.0974	PQL	mg/Kg	J	Q, E

Sample ID: SL-171-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 2:21:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.103	MDL	0.390	PQL	mg/Kg	J	E, A

Sample ID: SL-172-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 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
ANTIMONY	0.153	J	0.0774	MDL	0.209	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.11		0.0837	MDL	0.419	PQL	mg/Kg	J	E, A
BERYLLIUM	0.726		0.0167	MDL	0.105	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-172-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
CADMIUM	0.371		0.0460	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	24.8		0.126	MDL	0.419	PQL	mg/Kg	J	Q, A
COBALT	7.57		0.0209	MDL	0.105	PQL	mg/Kg	J	Q, E, A
COPPER	14.7		0.0837	MDL	0.419	PQL	mg/Kg	J	Q, E, E, A
LEAD	13.2		0.0107	MDL	0.209	PQL	mg/Kg	J	E, A
NICKEL	17.5		0.105	MDL	0.419	PQL	mg/Kg	J	Q, E, A
SILVER	0.0386	J	0.0149	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.310		0.0314	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	45.6		0.0230	MDL	0.105	PQL	mg/Kg	J	E, A
ZINC	107		0.586	MDL	3.14	PQL	mg/Kg	J	E, A

Sample ID: SL-172-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 11:18:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.168	J	0.0607	MDL	0.419	PQL	mg/Kg	J	Z, Q

Sample ID: SL-172-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 11:18:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.602		0.0523	MDL	0.105	PQL	mg/Kg	J	Q, E

Sample ID: SL-172-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 11:18:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	115		0.111	MDL	0.419	PQL	mg/Kg	J	E, A

Sample ID: SL-174-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 8:16:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.188	J	0.0740	MDL	0.200	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.76		0.0800	MDL	0.400	PQL	mg/Kg	J	E, A
BERYLLIUM	0.772		0.0160	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.238		0.0440	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	26.3		0.120	MDL	0.400	PQL	mg/Kg	J	Q, A
COBALT	8.42		0.0200	MDL	0.100	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-174-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:16:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	25.1		0.0800	MDL	0.400	PQL	mg/Kg	J	Q, E, E, A
LEAD	19.4		0.0102	MDL	0.200	PQL	mg/Kg	J	E, A
NICKEL	18.8		0.100	MDL	0.400	PQL	mg/Kg	J	Q, E, A
SILVER	0.0599	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q
THALLIUM	0.348		0.0300	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	49.0		0.0220	MDL	0.100	PQL	mg/Kg	J	E, A
ZINC	89.7		0.560	MDL	3.00	PQL	mg/Kg	J	E, A

Sample ID: SL-174-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:16:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.188	J	0.0580	MDL	0.400	PQL	mg/Kg	J	Z, Q

Sample ID: SL-174-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:16:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.739		0.0500	MDL	0.100	PQL	mg/Kg	J	Q, E

Sample ID: SL-174-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:16:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	147		0.106	MDL	0.400	PQL	mg/Kg	J	E, A

Sample ID: SL-178-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0740	MDL	0.200	PQL	mg/Kg	J	Z, Q, E
ARSENIC	7.16		0.0800	MDL	0.400	PQL	mg/Kg	J	E, A
BERYLLIUM	0.722		0.0160	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.250		0.0440	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	26.1		0.120	MDL	0.400	PQL	mg/Kg	J	Q, A
COBALT	8.67		0.0200	MDL	0.100	PQL	mg/Kg	J	Q, E, A
COPPER	15.6		0.0800	MDL	0.400	PQL	mg/Kg	J	Q, E, E, A
LEAD	25.1		0.0102	MDL	0.200	PQL	mg/Kg	J	E, A
NICKEL	16.3		0.100	MDL	0.400	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-178-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0520	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q
THALLIUM	0.357		0.0300	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	49.1		0.0220	MDL	0.100	PQL	mg/Kg	J	E, A
ZINC	98.1		0.560	MDL	3.00	PQL	mg/Kg	J	E, A

Sample ID: SL-178-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0580	MDL	0.400	PQL	mg/Kg	J	Z, Q

Sample ID: SL-178-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:40:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.554		0.0500	MDL	0.100	PQL	mg/Kg	J	Q, E

Sample ID: SL-178-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:40:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	115		0.106	MDL	0.400	PQL	mg/Kg	J	E, A

Sample ID: SL-185-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:21:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.219		0.0744	MDL	0.201	PQL	mg/Kg	J	Q, E
ARSENIC	4.83		0.0805	MDL	0.402	PQL	mg/Kg	J	E, A
BERYLLIUM	0.671		0.0161	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	0.362		0.0443	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	22.1		0.121	MDL	0.402	PQL	mg/Kg	J	Q, A
COBALT	7.09		0.0201	MDL	0.101	PQL	mg/Kg	J	Q, E, A
COPPER	20.2		0.0805	MDL	0.402	PQL	mg/Kg	J	Q, E, E, A
LEAD	17.9		0.0103	MDL	0.201	PQL	mg/Kg	J	E, A
NICKEL	16.1		0.101	MDL	0.402	PQL	mg/Kg	J	Q, E, A
SILVER	0.0682	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.332		0.0302	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	41.7		0.0221	MDL	0.101	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-185-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 9:21:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	95.1		0.563	MDL	3.02	PQL	mg/Kg	J	E, A

Sample ID: SL-185-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 9:21:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.173	J	0.0583	MDL	0.402	PQL	mg/Kg	J	Z, Q

Sample ID: SL-185-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 9:21:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.884		0.0503	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-185-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 9:21:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	159		0.107	MDL	0.402	PQL	mg/Kg	J	E, A

Sample ID: SL-301-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 8:01:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.278		0.0724	MDL	0.196	PQL	mg/Kg	J	Q, E
ARSENIC	13.5		0.0783	MDL	0.391	PQL	mg/Kg	J	E, A
BERYLLIUM	0.653		0.0157	MDL	0.0978	PQL	mg/Kg	J	Q, E
CADMIUM	0.378		0.0430	MDL	0.0978	PQL	mg/Kg	J	Q
CHROMIUM	25.5		0.117	MDL	0.391	PQL	mg/Kg	J	Q, A
COBALT	15.4		0.0196	MDL	0.0978	PQL	mg/Kg	J	Q, E, A
COPPER	31.3		0.0783	MDL	0.391	PQL	mg/Kg	J	Q, E, E, A
LEAD	15.6		0.010	MDL	0.196	PQL	mg/Kg	J	E, A
NICKEL	17.0		0.0978	MDL	0.391	PQL	mg/Kg	J	Q, E, A
SILVER	0.0606	J	0.0139	MDL	0.0978	PQL	mg/Kg	J	Z, Q
THALLIUM	0.274		0.0293	MDL	0.0978	PQL	mg/Kg	J	Q
VANADIUM	57.8		0.0215	MDL	0.0978	PQL	mg/Kg	J	E, A
ZINC	106		0.548	MDL	2.93	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-301-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:01:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0567	MDL	0.391	PQL	mg/Kg	J	Z, Q

Sample ID: SL-301-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:01:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.13		0.0489	MDL	0.0978	PQL	mg/Kg	J	Q, E

Sample ID: SL-301-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:01:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.104	MDL	0.391	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.59	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA6-SB-9.0-10.0 *Collected:* 7/19/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.86	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-166-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 3:09:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 2:21:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.88	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 11:18:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.91	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 8:16:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-178-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 8:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-185-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 9:21:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-085-SA6-SB-4.0-5.0 **Collected:** 7/19/2011 11:10:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0381	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-154-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0691	J	0.0069	MDL	0.0980	PQL	mg/Kg	J	Z

Sample ID: SL-166-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 3:09:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0071	J	0.0067	MDL	0.0952	PQL	mg/Kg	J	Z

Sample ID: SL-168-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:02:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0129	J	0.0069	MDL	0.0983	PQL	mg/Kg	J	Z

Sample ID: SL-171-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 2:21:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0078	J	0.0066	MDL	0.0940	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 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
MERCURY	0.0329	J	0.0074	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:16:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0138	J	0.0069	MDL	0.0983	PQL	mg/Kg	J	Z

Sample ID: SL-178-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0295	J	0.0067	MDL	0.0952	PQL	mg/Kg	J	Z

Sample ID: SL-185-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:21:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0239	J	0.0073	MDL	0.104	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-301-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:01:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0206	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z

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

Sample ID: EB-SA6-SS-071911 *Collected:* 7/19/2011 1:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	6.81		0.491	MDL	0.981	PQL	ng/L	UJ	B, S

Method Category: SVOA
Method: 6850 **Matrix:** SO

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	4.0	J	2.3	MDL	5.4	PQL	ug/Kg	J	Z

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

Sample ID: EB-SA6-SS-071911 *Collected:* 7/19/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLENE GLYCOL	20	U	20	MDL	200	PQL	mg/L	UJ	E

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

Sample ID: SL-166-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 3:09:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.0	J	0.81	MDL	2.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** AQ

Sample ID: EB-SA6-SS-071911 **Collected:** 7/19/2011 1:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.0087	J	0.0025	MDL	0.0097	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-151-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 9:36:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.2		0.067	MDL	0.34	PQL	ug/Kg	J	Q, Q
Chlordane	2.4	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.18	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z

Sample ID: SL-154-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 10:08:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.9	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.28	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.044	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-166-SA6-SS-0.0-0.5 **Collected:** 7/19/2011 3:09:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.066	U	0.066	MDL	0.34	PQL	ug/Kg	UJ	S
4,4'-DDE	0.066	U	0.066	MDL	0.34	PQL	ug/Kg	UJ	S
4,4'-DDT	0.20	U	0.20	MDL	0.34	PQL	ug/Kg	UJ	S
ALDRIN	0.066	U	0.066	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.060	U	0.060	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	0.80	U	0.80	MDL	3.4	PQL	ug/Kg	UJ	S
DELTA-BHC	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.066	U	0.066	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.044	U	0.044	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.066	U	0.066	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.066	U	0.066	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN	0.066	U	0.066	MDL	0.34	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-166-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 3:09:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.19	U	0.19	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.066	U	0.066	MDL	0.34	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.060	U	0.060	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.12	J	0.066	MDL	0.34	PQL	ug/Kg	J	Z, S
TOXAPHENE	2.2	U	2.2	MDL	6.6	PQL	ug/Kg	UJ	S

Sample ID: SL-168-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 1:02:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.054	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.23	J	0.066	MDL	0.34	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.13	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-169-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
4,4'-DDD	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.077	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z, S
Chlordane	0.81	U	0.81	MDL	3.4	PQL	ug/Kg	UJ	S
DELTA-BHC	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.044	U	0.044	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	2.9	U	2.9	MDL	2.9	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	1.8	U	1.8	MDL	1.8	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-169-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
MIREX	0.60		0.067	MDL	0.34	PQL	ug/Kg	J	S

Sample ID: SL-171-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 2:21:00 ***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	0.14	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z, S
4,4'-DDE	0.25	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.14	U	0.14	MDL	0.34	PQL	ug/Kg	UJ	S
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	0.81	U	0.81	MDL	3.4	PQL	ug/Kg	UJ	S
DELTA-BHC	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.045	U	0.045	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.19	U	0.19	MDL	0.34	PQL	ug/Kg	UJ	S
TOXAPHENE	15	U	15	MDL	15	PQL	ug/Kg	UJ	S

Sample ID: SL-172-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
4,4'-DDD	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDE	0.21	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.36	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z, S
ALDRIN	0.072	U	0.072	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.067	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-172-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
BETA-BHC	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	0.87	U	0.87	MDL	3.7	PQL	ug/Kg	UJ	S
DELTA-BHC	0.039	U	0.039	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.15	U	0.15	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.16	U	0.16	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	5.8	U	5.8	MDL	7.2	PQL	ug/Kg	UJ	S

Sample ID: SL-174-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 8:16:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.6	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-178-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
4,4'-DDE	1.9		0.067	MDL	0.34	PQL	ug/Kg	J	S
Chlordane	6.5		0.81	MDL	3.4	PQL	ug/Kg	J	S
ENDRIN ALDEHYDE	0.96		0.067	MDL	0.34	PQL	ug/Kg	J	S
HEPTACHLOR	0.078	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z, S

Sample ID: SL-185-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 9:21:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.099	U	0.099	MDL	0.36	PQL	ug/Kg	UJ	S
4,4'-DDE	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-185-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 9:21:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.38		0.069	MDL	0.36	PQL	ug/Kg	J	S
ALDRIN	0.069	U	0.069	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.036	U	0.036	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	3.6	PQL	ug/Kg	UJ	S
DELTA-BHC	0.038	U	0.038	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.069	U	0.069	MDL	0.36	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	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN	0.085	U	0.085	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.076	U	0.076	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.063	U	0.063	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.99	U	0.99	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	S
TOXAPHENE	2.3	U	2.3	MDL	6.9	PQL	ug/Kg	UJ	S

Sample ID: SL-301-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 8:01:00 ***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	0.087	U	0.087	MDL	0.35	PQL	ug/Kg	UJ	S
4,4'-DDE	0.28	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.91		0.067	MDL	0.35	PQL	ug/Kg	J	S
ALDRIN	0.067	U	0.067	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	0.22		0.061	MDL	0.17	PQL	ug/Kg	J	S
Chlordane	0.81	U	0.81	MDL	3.5	PQL	ug/Kg	UJ	S
DELTA-BHC	0.049	U	0.049	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.18	U	0.18	MDL	0.35	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.045	U	0.045	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.077	U	0.077	MDL	0.35	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-301-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:01:00 *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	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN	0.24	U	0.24	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.42	U	0.42	MDL	0.42	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.047	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z, S
HEPTACHLOR	0.094	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z, S
HEPTACHLOR EPOXIDE	0.066	J	0.035	MDL	0.17	PQL	ug/Kg	J	Z, S
METHOXYCHLOR	0.35	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.60	U	0.60	MDL	0.60	PQL	ug/Kg	UJ	S
TOXAPHENE	2.2	U	2.2	MDL	6.7	PQL	ug/Kg	UJ	S

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-154-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.2	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-168-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:02:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.3	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z
Aroclor 5460	3.0	J	1.0	MDL	3.3	PQL	ug/Kg	J	Z

Sample ID: SL-171-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 2:21:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.2	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 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 1260	0.73	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-174-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:16:00 *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	1.2	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z
Aroclor 5460	2.1	J	1.0	MDL	3.3	PQL	ug/Kg	J	Z

Sample ID: SL-185-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:21:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	3.0		0.41	MDL	1.8	PQL	ug/Kg	J	S
Aroclor 5460	4.0		1.0	MDL	3.5	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-151-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.40	U	0.40	MDL	1.2	PQL	ug/Kg	R	Q
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	Q, Q, L

Sample ID: SL-154-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 10:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-166-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 3:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-168-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:02:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-169-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 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	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-171-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 2:21:00 *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	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-172-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 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
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-174-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-178-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.77	J	0.40	MDL	1.2	PQL	ug/Kg	J	Z, L
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L
MCPP	590		75	MDL	250	PQL	ug/Kg	UJ	L, B

Sample ID: SL-185-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:21:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L
MCPP	1000		78	MDL	260	PQL	ug/Kg	UJ	L, B

Sample ID: SL-301-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 8:01:00 *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	1.8	J	1.2	MDL	3.7	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

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

Sample ID: **SL-084-SA6-SB-4.0-5.0** ***Collected:*** **7/19/2011 9:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	35	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	120	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	110	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	78	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	72	J	18	MDL	180	PQL	ug/Kg	J	Z
CARBAZOLE	30	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	120	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	57	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: **SL-084-SA6-SB-9.0-10.0** ***Collected:*** **7/19/2011 9:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	23	J	18	MDL	180	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	25	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: **SL-085-SA6-SB-4.0-5.0** ***Collected:*** **7/19/2011 11:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: **SL-151-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 9:36:00** ***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	340	U	340	MDL	1000	PQL	ug/Kg	UJ	Q
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	R	Q

Sample ID: **SL-168-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 1:02:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	17	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-169-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
BENZO(B)FLUORANTHENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z
CHRYSENE	24	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	22	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	48	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-171-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 2:21:00 ***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	30	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-178-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
BENZO(G,H,I)PERYLENE	87	J	17	MDL	170	PQL	ug/Kg	J	Z
Butylbenzylphthalate	19	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	76	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-301-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 8:01:00 ***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	34	J	17	MDL	170	PQL	ug/Kg	J	Z
ANTHRACENE	87	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	90	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	120	J	17	MDL	170	PQL	ug/Kg	J	Z
CARBAZOLE	62	J	17	MDL	170	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	34	J	17	MDL	170	PQL	ug/Kg	J	Z
DIBENZOFURAN	22	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORENE	27	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	93	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: EB-SA6-SS-071911 *Collected:* 7/19/2011 1:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.27	J	0.054	MDL	1.1	PQL	ug/L	J	Z
Butylbenzylphthalate	0.17	J	0.054	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.23	J	0.054	MDL	1.1	PQL	ug/L	U	B
Di-n-octylphthalate	0.31	J	0.054	MDL	1.1	PQL	ug/L	U	B

Method Category: SVOA

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

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.0	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	24		6.5	MDL	19	PQL	ug/Kg	U	B

Sample ID: SL-084-SA6-SB-9.0-10.0 *Collected:* 7/19/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.90	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	39		6.4	MDL	19	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.42	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.63	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.5	MDL	20	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	0.92	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-151-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 9:36:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	6.1	J	3.4	MDL	17	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	34		6.7	MDL	17	PQL	ug/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

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

Sample ID: **SL-151-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 9:36:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	44		6.7	MDL	17	PQL	ug/Kg	J	Q
BENZO(K)FLUORANTHENE	15	J	6.7	MDL	17	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	64	J	60	MDL	180	PQL	ug/Kg	U	B
CHRYSENE	36		3.4	MDL	17	PQL	ug/Kg	J	Q
Di-n-butylphthalate	68	J	60	MDL	180	PQL	ug/Kg	U	B
FLUORANTHENE	65		6.7	MDL	17	PQL	ug/Kg	J	Q, Q
INDENO(1,2,3-CD)PYRENE	14	J	6.7	MDL	17	PQL	ug/Kg	J	Z
PHENANTHRENE	32		6.7	MDL	17	PQL	ug/Kg	J	Q
PYRENE	47		6.7	MDL	17	PQL	ug/Kg	J	Q, Q

Sample ID: **SL-154-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 10:08:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.42	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	1.1	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	6.1	MDL	18	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.90	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-166-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 3:09:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.50	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-168-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 1:02:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.70	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.66	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	35		6.0	MDL	18	PQL	ug/Kg	U	B
NAPHTHALENE	0.74	J	0.66	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.82	J	0.66	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.66	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

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

Sample ID: **SL-169-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 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
BIS(2-ETHYLHEXYL)PHTHALATE	19		6.1	MDL	18	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.6	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.70	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-171-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 2:21:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-172-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 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
ANTHRACENE	0.49	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	6.5	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	1.1	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.79	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-174-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 8:16:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.5	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	18		6.0	MDL	18	PQL	ug/Kg	U	B
CHRYSENE	0.84	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.75	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.94	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-178-SA6-SS-0.0-0.5** ***Collected:*** **7/19/2011 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	66		6.0	MDL	18	PQL	ug/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory:** LL

EDD Filename: PrepDE203_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-178-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 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
Di-n-butylphthalate	28		6.0	MDL	18	PQL	ug/Kg	U	B
FLUORENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-185-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 9:21:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.82	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	6.3	MDL	19	PQL	ug/Kg	U	B
FLUORANTHENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-301-SA6-SS-0.0-0.5 ***Collected:*** 7/19/2011 8:01:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.69	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.88	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	41		6.0	MDL	18	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.4	J	6.0	MDL	18	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.3	J	6.0	MDL	18	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-084-SA6-SB-9.0-10.0 ***Collected:*** 7/19/2011 9:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	460	J	110	MDL	540	PQL	ug/Kg	J	Z

Sample ID: SL-085-SA6-SB-7.0-8.0 ***Collected:*** 7/19/2011 11:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	120	J	110	MDL	540	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-166-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 3:09:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	UJ	Q
O-TERPHENYL	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	UJ	Q
p-Terphenyl	1.5	U	1.5	MDL	3.5	PQL	mg/Kg	UJ	Q

Sample ID: SL-168-SA6-SS-0.0-0.5 *Collected:* 7/19/2011 1:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	200	J	100	MDL	500	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-084-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 9:35:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.5	J	0.16	MDL	4.2	PQL	ug/Kg	J	Z
ACETONE	11		7.1	MDL	8.5	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	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

Sample ID: SL-085-SA6-SB-4.0-5.0 *Collected:* 7/19/2011 11:10:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.3	J	6.5	MDL	7.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE203

Method Blank Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWA20B261436	8/9/2011 2:36:00 PM	N-NITROSODIMETHYLAMINE	2.04 ng/L	EB-SA6-SS-071911

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-SA6-SS-071911(RES)	N-NITROSODIMETHYLAMINE	6.81 ng/L	6.81U ng/L

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20848AB221837	7/28/2011 6:37:00 PM	BORON STRONTIUM Zirconium	0.0029 mg/L 0.00029 mg/L 0.0059 mg/L	EB-SA6-SS-071911

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-SA6-SS-071911(REA3)	BORON	0.0038 mg/L	0.0038U mg/L
EB-SA6-SS-071911(REA3)	STRONTIUM	0.00037 mg/L	0.00037U mg/L

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20108CB222043	7/28/2011 8:43:00 PM	BORON CALCIUM MANGANESE PHOSPHORUS STRONTIUM TIN TITANIUM	0.606 mg/Kg 8.49 mg/Kg 0.0440 mg/Kg 1.39 mg/Kg 0.0460 mg/Kg 1.63 mg/Kg 0.0830 mg/Kg	SL-151-SA6-SS-0.0-0.5 SL-154-SA6-SS-0.0-0.5
P20608CB221024	7/30/2011 10:24:00 AM	CALCIUM IRON MANGANESE PHOSPHORUS TIN TITANIUM Zirconium	5.42 mg/Kg 10.5 mg/Kg 0.0980 mg/Kg 1.41 mg/Kg 1.75 mg/Kg 0.0880 mg/Kg 0.692 mg/Kg	SL-084-SA6-SB-4.0-5.0 SL-084-SA6-SB-9.0-10.0 SL-085-SA6-SB-4.0-5.0 SL-085-SA6-SB-7.0-8.0 SL-166-SA6-SS-0.0-0.5 SL-168-SA6-SS-0.0-0.5 SL-169-SA6-SS-0.0-0.5 SL-171-SA6-SS-0.0-0.5 SL-172-SA6-SS-0.0-0.5 SL-174-SA6-SS-0.0-0.5 SL-178-SA6-SS-0.0-0.5 SL-185-SA6-SS-0.0-0.5 SL-301-SA6-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **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-084-SA6-SB-4.0-5.0(REA)	TIN	3.69 mg/Kg	3.69U mg/Kg
SL-084-SA6-SB-9.0-10.0(REA)	TIN	3.52 mg/Kg	3.52U mg/Kg
SL-085-SA6-SB-4.0-5.0(REA)	TIN	3.16 mg/Kg	3.16U mg/Kg
SL-085-SA6-SB-7.0-8.0(REA)	TIN	3.33 mg/Kg	3.33U mg/Kg
SL-151-SA6-SS-0.0-0.5(RES)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-154-SA6-SS-0.0-0.5(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-166-SA6-SS-0.0-0.5(REA)	TIN	3.32 mg/Kg	3.32U mg/Kg
SL-168-SA6-SS-0.0-0.5(REA)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-169-SA6-SS-0.0-0.5(REA)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-169-SA6-SS-0.0-0.5(REA)	Zirconium	3.37 mg/Kg	3.37U mg/Kg
SL-171-SA6-SS-0.0-0.5(REA)	TIN	3.30 mg/Kg	3.30U mg/Kg
SL-172-SA6-SS-0.0-0.5(REA)	TIN	3.37 mg/Kg	3.37U mg/Kg
SL-174-SA6-SS-0.0-0.5(REA)	TIN	3.16 mg/Kg	3.16U mg/Kg
SL-178-SA6-SS-0.0-0.5(REA)	TIN	3.16 mg/Kg	3.16U mg/Kg
SL-178-SA6-SS-0.0-0.5(REA)	Zirconium	2.92 mg/Kg	2.92U mg/Kg
SL-185-SA6-SS-0.0-0.5(REA)	TIN	3.10 mg/Kg	3.10U mg/Kg
SL-185-SA6-SS-0.0-0.5(REA)	Zirconium	3.41 mg/Kg	3.41U mg/Kg
SL-301-SA6-SS-0.0-0.5(REA)	TIN	3.25 mg/Kg	3.25U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20626BB221350A	7/28/2011 1:50:00 PM	LEAD	0.0239 mg/Kg	SL-084-SA6-SB-4.0-5.0 SL-084-SA6-SB-9.0-10.0 SL-085-SA6-SB-4.0-5.0 SL-085-SA6-SB-7.0-8.0 SL-166-SA6-SS-0.0-0.5 SL-168-SA6-SS-0.0-0.5 SL-169-SA6-SS-0.0-0.5 SL-171-SA6-SS-0.0-0.5 SL-172-SA6-SS-0.0-0.5 SL-174-SA6-SS-0.0-0.5 SL-178-SA6-SS-0.0-0.5 SL-185-SA6-SS-0.0-0.5 SL-301-SA6-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09096AB240626A	8/3/2011 6:26:00 AM	MCPP	370 ug/Kg	SL-151-SA6-SS-0.0-0.5 SL-154-SA6-SS-0.0-0.5 SL-166-SA6-SS-0.0-0.5 SL-168-SA6-SS-0.0-0.5 SL-169-SA6-SS-0.0-0.5 SL-171-SA6-SS-0.0-0.5 SL-172-SA6-SS-0.0-0.5 SL-174-SA6-SS-0.0-0.5 SL-178-SA6-SS-0.0-0.5 SL-185-SA6-SS-0.0-0.5 SL-301-SA6-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-178-SA6-SS-0.0-0.5(RES)	MCPP	590 ug/Kg	590U ug/Kg
SL-185-SA6-SS-0.0-0.5(RES)	MCPP	1000 ug/Kg	1000U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB21B211617A	7/20/2011 4:17:00 PM	ACETONE METHYLENE CHLORIDE	8.7 ug/Kg 0.96 ug/Kg	SL-084-SA6-SB-4.0-5.0 SL-085-SA6-SB-4.0-5.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-084-SA6-SB-4.0-5.0(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-084-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.2U ug/Kg
SL-085-SA6-SB-4.0-5.0(RES)	ACETONE	7.3 ug/Kg	7.7U ug/Kg
SL-085-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.9U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC20B260551	7/30/2011 5:51:00 AM	Di-n-butylphthalate Di-n-octylphthalate	0.14 ug/L 0.28 ug/L	EB-SA6-SS-071911

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-SA6-SS-071911(RES)	Di-n-butylphthalate	0.23 ug/L	1.1U ug/L
EB-SA6-SS-071911(RES)	Di-n-octylphthalate	0.31 ug/L	1.1U ug/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB20B260231	8/2/2011 2:31:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	10 ug/Kg 11 ug/Kg	SL-084-SA6-SB-4.0-5.0 SL-084-SA6-SB-9.0-10.0 SL-085-SA6-SB-4.0-5.0 SL-085-SA6-SB-7.0-8.0 SL-151-SA6-SS-0.0-0.5 SL-154-SA6-SS-0.0-0.5 SL-166-SA6-SS-0.0-0.5 SL-168-SA6-SS-0.0-0.5 SL-169-SA6-SS-0.0-0.5 SL-171-SA6-SS-0.0-0.5 SL-172-SA6-SS-0.0-0.5 SL-174-SA6-SS-0.0-0.5 SL-178-SA6-SS-0.0-0.5 SL-185-SA6-SS-0.0-0.5 SL-301-SA6-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-084-SA6-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	24U ug/Kg
SL-084-SA6-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	39 ug/Kg	39U ug/Kg
SL-085-SA6-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	13 ug/Kg	20U ug/Kg
SL-151-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	64 ug/Kg	180U ug/Kg
SL-151-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	68 ug/Kg	180U ug/Kg
SL-154-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	18U ug/Kg
SL-168-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	35 ug/Kg	35U ug/Kg
SL-169-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	19U ug/Kg
SL-172-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	18 ug/Kg	20U ug/Kg
SL-174-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	18 ug/Kg	18U ug/Kg
SL-178-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	66 ug/Kg	66U ug/Kg
SL-178-SA6-SS-0.0-0.5(RES)	Di-n-butylphthalate	28 ug/Kg	28U ug/Kg
SL-185-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	19U ug/Kg
SL-301-SA6-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	41 ug/Kg	41U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **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-151-SA6-SS-0.0-0.5MS SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	2,4,5-T 2,4,5-TP (Silvex) DALAPON	296 - -	346 - -	10.00-156.00 24.00-141.00 10.00-125.00	- 38 (35.00) 54 (50.00)	2,4,5-T 2,4,5-TP (Silvex) DALAPON	J (all detects)
SL-151-SA6-SS-0.0-0.5MS SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	DICAMBA DINOSEB	0 6	- 0	10.00-190.00 10.00-46.00	200 (50.00) 200 (35.00)	DICAMBA DINOSEB	J(all detects) R(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-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	4,4'-DDE DELTA-BHC	- -	- -	18.00-161.00 23.00-140.00	63 (50.00) 52 (50.00)	4,4'-DDE DELTA-BHC	J(all detects)
SL-151-SA6-SS-0.0-0.5MS SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	4,4'-DDT	-82	-	10.00-176.00	86 (50.00)	4,4'-DDT	J(all detects) R(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-166-SA6-SS-0.0-0.5MS SL-166-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	m-Terphenyl O-TERPHENYL p-Terphenyl	47 59 52	72 - -	75.00-125.00 75.00-125.00 75.00-125.00	43 (20.00) 45 (20.00) 42 (20.00)	m-Terphenyl O-TERPHENYL p-Terphenyl	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-169-SA6-SS-0.0-0.5MS SL-169-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	EFH (C21-C30) EFH (C30-C40)	1582 6488	2178 5760	49.00-123.00 49.00-123.00	- -	EFH (C21-C30) EFH (C30-C40)	No Qual, >4x Diluted out
SL-169-SA6-SS-0.0-0.5MS SL-169-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	EFH (C12-C14) EFH (C15-C20) EFH (C8-C11)	0 0 0	0 0 0	49.00-123.00 49.00-123.00 49.00-123.00	- - -	EFH (C12-C14) EFH (C15-C20) EFH (C8-C11)	No Qual, >4x Diluted out

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **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-166-SA6-SS-0.0-0.5MSD (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	CADMIUM SILVER THALLIUM	- - -	142 141 129	75.00-125.00 75.00-125.00 75.00-125.00	- - -	CADMIUM SILVER THALLIUM	J(all detects)
SL-166-SA6-SS-0.0-0.5MS **SL-166-SA6-SS-0.0-0.5MSD** (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	ARSENIC COPPER LEAD VANADIUM ZINC	-2 26 27 -18 -139	276 - 175 - 181	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	43 (20.00) 27 (20.00) 30 (20.00) 22 (20.00) 28 (20.00)	ARSENIC COPPER LEAD VANADIUM ZINC	J(all detects) R(all non-detects) As, Pb, V, Zn No Qual, %R>4x
SL-166-SA6-SS-0.0-0.5MS **SL-166-SA6-SS-0.0-0.5MSD** (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	ANTIMONY BERYLLIUM CHROMIUM COBALT NICKEL	32 - 62 - 53	48 130 - 138 -	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	31 (20.00) 21 (20.00) - 23 (20.00) 22 (20.00)	ANTIMONY BERYLLIUM CHROMIUM COBALT NICKEL	J(all detects) UJ(all non-detects)
SL-166-SA6-SS-0.0-0.5MSD (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	SELENIUM	-	129	75.00-125.00	-	SELENIUM	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **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-166-SA6-SS-0.0-0.5MSD (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	MOLYBDENUM	-	142	75.00-125.00	21 (20.00)	MOLYBDENUM	J(all detects) UJ(all non-detects)
SL-166-SA6-SS-0.0-0.5MS SL-166-SA6-SS-0.0-0.5MSD (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	BARIUM	-275	-	75.00-125.00	24 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual, %R>4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-166-SA6-SS-0.0-0.5MS	ALUMINUM	-344	1677	75.00-125.00	23 (20.00)	ALUMINUM	
SL-166-SA6-SS-0.0-0.5MSD	CALCIUM	-47	149	75.00-125.00	-	CALCIUM	
(SL-084-SA6-SB-4.0-5.0	IRON	-5900	-836	75.00-125.00	-	IRON	
SL -084-SA6-SB-9.0-10.0	MAGNESIUM	-527	195	75.00-125.00	22 (20.00)	MAGNESIUM	J(all detects)
SL -085-SA6-SB-4.0-5.0	MANGANESE	-111	-	75.00-125.00	25 (20.00)	MANGANESE	UJ(all non-detects)
SL -085-SA6-SB-7.0-8.0	PHOSPHORUS	7	-	75.00-125.00	-	PHOSPHORUS	
SL -166-SA6-SS-0.0-0.5	POTASSIUM	16	-	75.00-125.00	22 (20.00)	POTASSIUM	
SL -168-SA6-SS-0.0-0.5	TITANIUM	-63	272	75.00-125.00	23 (20.00)	TITANIUM	No Qual, %R>4x
SL -169-SA6-SS-0.0-0.5							
SL -171-SA6-SS-0.0-0.5							
SL -172-SA6-SS-0.0-0.5							
SL -174-SA6-SS-0.0-0.5							
SL -178-SA6-SS-0.0-0.5							
SL -185-SA6-SS-0.0-0.5							
SL -301-SA6-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **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-151-SA6-SS-0.0-0.5MS (SL-151-SA6-SS-0.0-0.5 SL -154-SA6-SS-0.0-0.5 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5)	FLUORIDE	57	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-301-SA6-SS-0.0-0.5MS (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -301-SA6-SS-0.0-0.5)	FLUORIDE	73	-	80.00-120.00	-	FLUORIDE	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-151-SA6-SS-0.0-0.5MS SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	ACENAPHTHENE	106	107	63.00-105.00	-	ACENAPHTHENE	J(all detects)
	Butylbenzylphthalate	227	234	57.00-173.00	-	Butylbenzylphthalate	
	Di-n-octylphthalate	258	267	40.00-192.00	-	Di-n-octylphthalate	
	NAPHTHALENE	-	103	61.00-102.00	-	NAPHTHALENE	
	N-NITROSODIMETHYLAMINE	-	128	48.00-113.00	-	N-NITROSODIMETHYLAMINE	
SL-151-SA6-SS-0.0-0.5MS SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	Diethylphthalate	0	0	70.00-136.00	-	Diethylphthalate	J(all detects) R(all non-detects)
	Dimethylphthalate	0	0	74.00-118.00	-	Dimethylphthalate	
	FLUORANTHENE	-27	20	26.00-166.00	-	FLUORANTHENE	
	PYRENE	-3	8	15.00-153.00	-	PYRENE	
SL-151-SA6-SS-0.0-0.5MS SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	BENZO(A)ANTHRACENE	40	49	59.00-128.00	-	BENZO(A)ANTHRACENE	J(all detects) UJ(all non-detects)
	BENZO(B)FLUORANTHENE	21	-	43.00-155.00	-	BENZO(B)FLUORANTHENE	
	CHRYSENE	42	-	48.00-134.00	-	CHRYSENE	
	PHENANTHRENE	20	41	62.00-122.00	-	PHENANTHRENE	

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	HEXACHLOROCYCLOPENTADI	-	-	10.00-153.00	48 (30.00)	HEXACHLOROCYCLOPENTAD	J(all detects)
SL-151-SA6-SS-0.0-0.5MS SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)
SL-151-SA6-SS-0.0-0.5MSD (EB-SA6-SS-071911)	2,4-DINITROPHENOL	-	14	20.00-143.00	44 (30.00)	2,4-DINITROPHENOL	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: DE203_v2. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-166-SA6-SS-0.0-0.5DUP (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	SODIUM	66	20.00	No qual, OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-166-SA6-SS-0.0-0.5DUP (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	COPPER SILVER	21 21	20.00 20.00	J(all detects) UJ(all non-detects) Ag No qual, OK by Difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-169-SA6-SS-0.0-0.5DUP (SL-169-SA6-SS-0.0-0.5)	MERCURY	200	20.00	No Qual, OK by Difference

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

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: PrepDE203_v2 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12021AY321245A (EB-SA6-SS-071911)	ETHYLENE GLYCOL	-	-	80.00-124.00	26 (20.00)	ETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12076AQ241839A	3-NITROTOLUENE	110	110	69.00-107.00	-	3-NITROTOLUENE	J(all detects)
P12076AY241921A (EB-SA6-SS-071911)	PETN	129	129	80.00-120.00	-	PETN	

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12096AQ240654A (SL-151-SA6-SS-0.0-0.5 SL -154-SA6-SS-0.0-0.5 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	DICAMBA	146	-	54.00-121.00	-	DICAMBA	J(all detects)
	MCPP	429	-	54.00-137.00	-	MCPP	
P12096AQ240654A (SL-151-SA6-SS-0.0-0.5 SL -154-SA6-SS-0.0-0.5 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	DINOSEB	5	-	10.00-36.00	-	DINOSEB	J(all detects) R(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **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
P20126DQ221514A (SL-151-SA6-SS-0.0-0.5 SL -154-SA6-SS-0.0-0.5)	ANTIMONY	78	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20108CQ222047 (SL-151-SA6-SS-0.0-0.5 SL -154-SA6-SS-0.0-0.5)	ALUMINUM IRON TITANIUM	122 126 155	- - -	80.00-120.00 80.00-120.00 80.00-120.00	- - -	ALUMINUM IRON TITANIUM	No Qual, SRM within QC limits

Method: 7471A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20411CQ220946 (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	MERCURY	121	-	85.00-120.00	-	MERCURY	No Qual, SRM within QC limits

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20608CQ221028 (SL-084-SA6-SB-4.0-5.0 SL -084-SA6-SB-9.0-10.0 SL -085-SA6-SB-4.0-5.0 SL -085-SA6-SB-7.0-8.0 SL -166-SA6-SS-0.0-0.5 SL -168-SA6-SS-0.0-0.5 SL -169-SA6-SS-0.0-0.5 SL -171-SA6-SS-0.0-0.5 SL -172-SA6-SS-0.0-0.5 SL -174-SA6-SS-0.0-0.5 SL -178-SA6-SS-0.0-0.5 SL -185-SA6-SS-0.0-0.5 SL -301-SA6-SS-0.0-0.5)	ALUMINUM IRON TITANIUM	130 130 168	- - -	80.00-120.00 80.00-120.00 80.00-120.00	- - -	ALUMINUM IRON TITANIUM	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
LCSB21Q211642A (SL-084-SA6-SB-4.0-5.0 SL -085-SA6-SB-4.0-5.0)	1,2-DIBROMO-3-CHLOROPROP	121	-	58.00-120.00	-	1,2-DIBROMO-3-CHLOROPRO	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE203 Laboratory: LL

EDD Filename: DE203_v2. eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB-SA6-SS-071911	N-Nitrosodimethylamine-d6	167	50.00-150.00	All Target Analytes	J (all detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-166-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	45	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-169-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	41	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-171-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	48	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-172-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	49	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-178-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	390	20.00-120.00	All Target Analytes	J(all detects)
SL-185-SA6-SS-0.0 -0.5	TETRACHLORO-M-XYLENE	40	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-301-SA6-SS-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
SL-084-SA6-SB-4.0 -5.0	DECACHLOROBIPHENYL	287	45.00-120.00	All Target Analytes	No qual, Diluted out
SL-185-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	149 180	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)

Method: 8270C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-084-SA6-SB-4.0 -5.0	2,4,6-TRIBROMOPHENOL	22	35.00-130.00	No Affected Compounds	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-SA6-SS-071911	BORON	J	0.0038	0.0500	PQL	mg/L	J (all detects)
	STRONTIUM	J	0.00037	0.0050	PQL	mg/L	

Method: 8081A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-SA6-SS-071911	HEPTACHLOR	J	0.0087	0.0097	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-SA6-SS-071911	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.27	1.1	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.17	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.23	1.1	PQL	ug/L	
	Di-n-octylphthalate	J	0.31	1.1	PQL	ug/L	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA6-SB-4.0-5.0	TIN	J	3.69	10.7	PQL	mg/Kg	J (all detects)
SL-084-SA6-SB-9.0-10.0	BORON	J	2.55	5.38	PQL	mg/Kg	J (all detects)
	TIN	J	3.52	10.8	PQL	mg/Kg	
SL-085-SA6-SB-4.0-5.0	BORON	J	4.93	5.39	PQL	mg/Kg	J (all detects)
	TIN	J	3.16	10.8	PQL	mg/Kg	
	Zirconium	J	4.25	5.39	PQL	mg/Kg	
SL-085-SA6-SB-7.0-8.0	BORON	J	4.22	5.23	PQL	mg/Kg	J (all detects)
	TIN	J	3.33	10.5	PQL	mg/Kg	
	Zirconium	J	3.72	5.23	PQL	mg/Kg	
SL-151-SA6-SS-0.0-0.5	BORON	J	4.08	4.95	PQL	mg/Kg	J (all detects)
	SODIUM	J	52.9	99.0	PQL	mg/Kg	
	TIN	J	2.96	9.90	PQL	mg/Kg	
	Zirconium	J	2.97	4.95	PQL	mg/Kg	
SL-154-SA6-SS-0.0-0.5	BORON	J	4.02	5.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	79.0	99.9	PQL	mg/Kg	
	TIN	J	3.08	9.99	PQL	mg/Kg	
	Zirconium	J	2.59	5.00	PQL	mg/Kg	
SL-166-SA6-SS-0.0-0.5	TIN	J	3.32	9.89	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.85	4.95	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-168-SA6-SS-0.0-0.5	BORON	J	4.90	4.99	PQL	mg/Kg	J (all detects)
	SODIUM	J	94.6	99.7	PQL	mg/Kg	
	TIN	J	2.88	9.97	PQL	mg/Kg	
	Zirconium	J	3.49	4.99	PQL	mg/Kg	
SL-169-SA6-SS-0.0-0.5	BORON	J	4.90	5.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.1	100	PQL	mg/Kg	
	TIN	J	2.99	10.0	PQL	mg/Kg	
	Zirconium	J	3.37	5.00	PQL	mg/Kg	
SL-171-SA6-SS-0.0-0.5	TIN	J	3.30	10.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.51	5.02	PQL	mg/Kg	
SL-172-SA6-SS-0.0-0.5	BORON	J	4.64	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	97.7	109	PQL	mg/Kg	
	TIN	J	3.37	10.9	PQL	mg/Kg	
	Zirconium	J	4.16	5.44	PQL	mg/Kg	
SL-174-SA6-SS-0.0-0.5	SODIUM	J	79.4	98.1	PQL	mg/Kg	J (all detects)
	TIN	J	3.16	9.81	PQL	mg/Kg	
	Zirconium	J	3.56	4.90	PQL	mg/Kg	
SL-178-SA6-SS-0.0-0.5	BORON	J	4.09	4.90	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.2	98.0	PQL	mg/Kg	
	TIN	J	3.16	9.80	PQL	mg/Kg	
	Zirconium	J	2.92	4.90	PQL	mg/Kg	
SL-185-SA6-SS-0.0-0.5	BORON	J	3.98	5.23	PQL	mg/Kg	J (all detects)
	SODIUM	J	76.5	105	PQL	mg/Kg	
	TIN	J	3.10	10.5	PQL	mg/Kg	
	Zirconium	J	3.41	5.23	PQL	mg/Kg	
SL-301-SA6-SS-0.0-0.5	SODIUM	J	62.2	97.8	PQL	mg/Kg	J (all detects)
	TIN	J	3.25	9.78	PQL	mg/Kg	
	Zirconium	J	3.63	4.89	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA6-SB-4.0-5.0	SELENIUM	J	0.236	0.421	PQL	mg/Kg	J (all detects)
	SILVER	J	0.102	0.105	PQL	mg/Kg	
SL-084-SA6-SB-9.0-10.0	SELENIUM	J	0.170	0.414	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0927	0.103	PQL	mg/Kg	
SL-085-SA6-SB-4.0-5.0	ANTIMONY	J	0.206	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.103	0.423	PQL	mg/Kg	
	SILVER	J	0.0432	0.106	PQL	mg/Kg	
SL-085-SA6-SB-7.0-8.0	ANTIMONY	J	0.0956	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0940	0.431	PQL	mg/Kg	
	SILVER	J	0.0414	0.108	PQL	mg/Kg	
SL-151-SA6-SS-0.0-0.5	ANTIMONY	J	0.124	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.122	0.396	PQL	mg/Kg	
	SILVER	J	0.0503	0.0990	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA6-SS-0.0-0.5	ANTIMONY	J	0.167	0.196	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.114	0.392	PQL	mg/Kg	
	SILVER	J	0.0952	0.0980	PQL	mg/Kg	
SL-166-SA6-SS-0.0-0.5	ANTIMONY	J	0.167	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.194	0.404	PQL	mg/Kg	
	SILVER	J	0.0717	0.101	PQL	mg/Kg	
SL-168-SA6-SS-0.0-0.5	ANTIMONY	J	0.148	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.157	0.395	PQL	mg/Kg	
	SILVER	J	0.0482	0.0988	PQL	mg/Kg	
SL-169-SA6-SS-0.0-0.5	SELENIUM	J	0.176	0.392	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0516	0.0980	PQL	mg/Kg	
SL-171-SA6-SS-0.0-0.5	SELENIUM	J	0.117	0.390	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0238	0.0974	PQL	mg/Kg	
SL-172-SA6-SS-0.0-0.5	ANTIMONY	J	0.153	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.168	0.419	PQL	mg/Kg	
	SILVER	J	0.0386	0.105	PQL	mg/Kg	
SL-174-SA6-SS-0.0-0.5	ANTIMONY	J	0.188	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.188	0.400	PQL	mg/Kg	
	SILVER	J	0.0599	0.100	PQL	mg/Kg	
SL-178-SA6-SS-0.0-0.5	ANTIMONY	J	0.136	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.146	0.400	PQL	mg/Kg	
	SILVER	J	0.0520	0.100	PQL	mg/Kg	
SL-185-SA6-SS-0.0-0.5	SELENIUM	J	0.173	0.402	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0682	0.101	PQL	mg/Kg	
SL-301-SA6-SS-0.0-0.5	SELENIUM	J	0.157	0.391	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0606	0.0978	PQL	mg/Kg	

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA6-SB-4.0-5.0	PERCHLORATE	J	4.0	5.4	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.59	1.1	PQL	mg/Kg	J (all detects)
SL-084-SA6-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.70	1.1	PQL	mg/Kg	J (all detects)
SL-085-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-154-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.86	1.0	PQL	mg/Kg	J (all detects)
SL-166-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.35	1.0	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-171-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.88	1.0	PQL	mg/Kg	J (all detects)
SL-172-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.91	1.1	PQL	mg/Kg	J (all detects)
SL-174-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.0	PQL	mg/Kg	J (all detects)
SL-178-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.49	1.0	PQL	mg/Kg	J (all detects)
SL-185-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.48	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA6-SB-4.0-5.0	MERCURY	J	0.0381	0.101	PQL	mg/Kg	J (all detects)
SL-154-SA6-SS-0.0-0.5	MERCURY	J	0.0691	0.0980	PQL	mg/Kg	J (all detects)
SL-166-SA6-SS-0.0-0.5	MERCURY	J	0.0071	0.0952	PQL	mg/Kg	J (all detects)
SL-168-SA6-SS-0.0-0.5	MERCURY	J	0.0129	0.0983	PQL	mg/Kg	J (all detects)
SL-171-SA6-SS-0.0-0.5	MERCURY	J	0.0078	0.0940	PQL	mg/Kg	J (all detects)
SL-172-SA6-SS-0.0-0.5	MERCURY	J	0.0329	0.106	PQL	mg/Kg	J (all detects)
SL-174-SA6-SS-0.0-0.5	MERCURY	J	0.0138	0.0983	PQL	mg/Kg	J (all detects)
SL-178-SA6-SS-0.0-0.5	MERCURY	J	0.0295	0.0952	PQL	mg/Kg	J (all detects)
SL-185-SA6-SS-0.0-0.5	MERCURY	J	0.0239	0.104	PQL	mg/Kg	J (all detects)
SL-301-SA6-SS-0.0-0.5	MERCURY	J	0.0206	0.101	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA6-SB-9.0-10.0	METHANOL	J	460	540	PQL	ug/Kg	J (all detects)
SL-085-SA6-SB-7.0-8.0	ETHANOL	J	120	540	PQL	ug/Kg	J (all detects)
SL-168-SA6-SS-0.0-0.5	ETHANOL	J	200	500	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-166-SA6-SS-0.0-0.5	EFH (C15-C20)	J	1.0	2.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-151-SA6-SS-0.0-0.5	Chlordane	J	2.4	3.4	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.18	0.34	PQL	ug/Kg	
SL-154-SA6-SS-0.0-0.5	Chlordane	J	2.9	3.5	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.28	0.35	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.044	0.17	PQL	ug/Kg	
SL-166-SA6-SS-0.0-0.5	MIREX	J	0.12	0.34	PQL	ug/Kg	J (all detects)
SL-168-SA6-SS-0.0-0.5	DELTA-BHC	J	0.054	0.17	PQL	ug/Kg	J (all detects)
	ENDOSULFAN II	J	0.23	0.34	PQL	ug/Kg	
	gamma-BHC (Lindane)	J	0.13	0.17	PQL	ug/Kg	
SL-169-SA6-SS-0.0-0.5	BETA-BHC	J	0.077	0.17	PQL	ug/Kg	J (all detects)
SL-171-SA6-SS-0.0-0.5	4,4'-DDD	J	0.14	0.34	PQL	ug/Kg	J (all detects)
	4,4'-DDE	J	0.25	0.34	PQL	ug/Kg	
SL-172-SA6-SS-0.0-0.5	4,4'-DDE	J	0.21	0.37	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.36	0.37	PQL	ug/Kg	
	ALPHA-BHC	J	0.067	0.18	PQL	ug/Kg	
SL-174-SA6-SS-0.0-0.5	Chlordane	J	2.6	3.4	PQL	ug/Kg	J (all detects)
SL-178-SA6-SS-0.0-0.5	HEPTACHLOR	J	0.078	0.17	PQL	ug/Kg	J (all detects)
SL-301-SA6-SS-0.0-0.5	4,4'-DDE	J	0.28	0.35	PQL	ug/Kg	J (all detects)
	gamma-BHC (Lindane)	J	0.047	0.17	PQL	ug/Kg	
	HEPTACHLOR	J	0.094	0.17	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.066	0.17	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-154-SA6-SS-0.0-0.5	Aroclor 5460	J	3.2	3.4	PQL	ug/Kg	J (all detects)
SL-168-SA6-SS-0.0-0.5	AROCLOR 1260	J	1.3	1.7	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	3.0	3.3	PQL	ug/Kg	
SL-171-SA6-SS-0.0-0.5	AROCLOR 1254	J	1.2	1.7	PQL	ug/Kg	J (all detects)
SL-172-SA6-SS-0.0-0.5	AROCLOR 1260	J	0.73	1.8	PQL	ug/Kg	J (all detects)
SL-174-SA6-SS-0.0-0.5	AROCLOR 1254	J	1.2	1.7	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.1	1.7	PQL	ug/Kg	
	Aroclor 5460	J	2.1	3.3	PQL	ug/Kg	

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-178-SA6-SS-0.0-0.5	DICAMBA	J	0.77	1.2	PQL	ug/Kg	J (all detects)
SL-301-SA6-SS-0.0-0.5	2,4-D	J	1.8	3.7	PQL	ug/Kg	J (all detects)

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

Reporting Limit Outliers

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA6-SB-4.0-5.0	1,2-DICHLOROETHANE	J	2.5	4.2	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.3	4.2	PQL	ug/Kg	
	TOLUENE	J	0.09	4.2	PQL	ug/Kg	
SL-085-SA6-SB-4.0-5.0	ACETONE	J	7.3	7.7	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.3	3.9	PQL	ug/Kg	
	TOLUENE	J	0.10	3.9	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA6-SB-4.0-5.0	ANTHRACENE	J	35	180	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	120	180	PQL	ug/Kg	
	BENZO(A)PYRENE	J	110	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	130	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	78	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	72	180	PQL	ug/Kg	
	CARBAZOLE	J	30	180	PQL	ug/Kg	
	CHRYSENE	J	120	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	57	180	PQL	ug/Kg	
SL-084-SA6-SB-9.0-10.0	BENZO(B)FLUORANTHENE	J	23	180	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	21	180	PQL	ug/Kg	
	FLUORANTHENE	J	25	180	PQL	ug/Kg	
	PYRENE	J	25	180	PQL	ug/Kg	
SL-085-SA6-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	20	180	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	20	180	PQL	ug/Kg	
	PYRENE	J	19	180	PQL	ug/Kg	
SL-168-SA6-SS-0.0-0.5	Di-n-butylphthalate	J	17	170	PQL	ug/Kg	J (all detects)
SL-169-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	17	170	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	24	170	PQL	ug/Kg	
	PHENANTHRENE	J	22	170	PQL	ug/Kg	
	PYRENE	J	48	170	PQL	ug/Kg	
SL-171-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	340	PQL	ug/Kg	J (all detects)
SL-178-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	87	170	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	19	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	76	170	PQL	ug/Kg	
SL-301-SA6-SS-0.0-0.5	ACENAPHTHENE	J	34	170	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	87	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	90	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	120	170	PQL	ug/Kg	
	CARBAZOLE	J	62	170	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	34	170	PQL	ug/Kg	
	DIBENZOFURAN	J	22	170	PQL	ug/Kg	
	FLUORENE	J	27	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	93	170	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA6-SB-4.0-5.0	ACENAPHTHYLENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
SL-084-SA6-SB-9.0-10.0	ANTHRACENE	J	0.90	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.7	1.8	PQL	ug/Kg	
SL-085-SA6-SB-4.0-5.0	ACENAPHTHYLENE	J	0.42	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.63	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.92	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.8	PQL	ug/Kg	
SL-151-SA6-SS-0.0-0.5	ANTHRACENE	J	6.1	17	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	15	17	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	64	180	PQL	ug/Kg	
	Di-n-butylphthalate	J	68	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	14	17	PQL	ug/Kg	
SL-154-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	0.42	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.90	1.7	PQL	ug/Kg	
SL-166-SA6-SS-0.0-0.5	ANTHRACENE	J	0.50	1.7	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.7	PQL	ug/Kg	
SL-168-SA6-SS-0.0-0.5	ANTHRACENE	J	0.70	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.74	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.82	1.7	PQL	ug/Kg	
	PYRENE	J	1.2	1.7	PQL	ug/Kg	
SL-169-SA6-SS-0.0-0.5	INDENO(1,2,3-CD)PYRENE	J	1.6	1.7	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.70	1.7	PQL	ug/Kg	
SL-171-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.3	1.7	PQL	ug/Kg	
	PYRENE	J	1.2	1.7	PQL	ug/Kg	
SL-172-SA6-SS-0.0-0.5	ANTHRACENE	J	0.49	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	20	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.8	PQL	ug/Kg	
	PYRENE	J	0.79	1.8	PQL	ug/Kg	
SL-174-SA6-SS-0.0-0.5	ANTHRACENE	J	1.5	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	CHRYSENE	J	0.84	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.75	1.7	PQL	ug/Kg	
	PYRENE	J	0.94	1.7	PQL	ug/Kg	
SL-178-SA6-SS-0.0-0.5	FLUORENE	J	1.4	1.7	PQL	ug/Kg	J (all detects)
SL-185-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	0.82	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.1	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.7	PQL	ug/Kg	
	PYRENE	J	1.3	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE203 **Laboratory: LL**

EDD Filename: PrepDE203_v2 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-301-SA6-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.69	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.88	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.4	18	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.3	18	PQL	ug/Kg	

LDC #: 26407C4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-21-11
SDG #: DE203 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JL
2nd Reviewer: MG

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/D (associated 3-15) (see below)
VII.	Duplicate Sample Analysis	SW	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=16

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

Validated Samples:

1	SL-151-SA6-SS-0.0-0.5	11	SL-301-SA6-SS-0.0-0.5	21	(#5) MSD (HG) ↓ Dup ↓	31	
2	SL-154-SA6-SS-0.0-0.5	12	SL-084-SA6-SB-4.0-5.0	22		32	
3	SL-166-SA6-SS-0.0-0.5	13	SL-084-SA6-SB-9.0-10.0	23		33	
4	SL-168-SA6-SS-0.0-0.5	14	SL-085-SA6-SB-4.0-5.0	24		34	
5	SL-169-SA6-SS-0.0-0.5	15	SL-085-SA6-SB-7.0-8.0	25		35	
6	SL-171-SA6-SS-0.0-0.5	16	EB-SA6-SS-071911	26		36	
7	SL-172-SA6-SS-0.0-0.5	17	(#3) MS	27		37	
8	SL-174-SA6-SS-0.0-0.5	18	MSD	28		38	
9	SL-178-SA6-SS-0.0-0.5	19	↓ Dup	29		39	
10	SL-185-SA6-SS-0.0-0.5	20	(#5) MS (HG)	30		40	

Notes: #1 & 2 associate with MS/D, Dup, SD from SDG: DE202

LDC #: 26407C4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: QZ
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x (MS: 2x)
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 1, 2

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2												
Zr	6.1	3.05	3.0	2.6												

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 3-15

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	3	4	5	8	9	10	11	15						
Zr	8.1	4.05	3.8	3.5	3.4	3.6	2.9	3.4	3.6	3.7						
Tl	0.12	0.12 ~~0.06~~														

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 #: 26407C4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CR
2nd Reviewer: MG

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: 7/19/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	16	Action Level	No Quals									
B	3.8	1.9										
Sr	0.37	0.185										

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 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE203
Matrix: SOIL Level (low/med): LOW

74 (associated w/ 3-15)

Background Lab Sample ID: 6349712BKG Matrix Spike Lab Sample ID: 6349712MS Matrix Spike Duplicate Lab Sample ID: 6349712MSD
% Solids for Sample: 99.1
Batch Id(s): P20608C, P20626B

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		15398.7851		14810.2182		18749.2372		171.0308	199.8182	MG/KG	-344		1677		23	*		20	P
Antimony	121	0.1671	B	0.5447		0.7447		1.1872	1.1989	MG/KG	32	N	48	N	31	*	75 - 125	20	MS
Arsenic	75	10.0888		10.0433		15.5958		1.9786	1.9982	MG/KG	-2		276		43	*		20	MS
Barium	137	156.3068		129.1427		164.9299		9.8930	9.9909	MG/KG	-275		86		24	*		20	MS
Beryllium	9	0.8650		1.5397		1.9045		0.7914	0.7993	MG/KG	85		130	N	21	*	75 - 125	20	MS
Boron		5.7399		170.2500		202.5297		171.0308	199.8182	MG/KG	96		98		17		84 - 115	20	P
Cadmium	111	0.2054		1.3409		1.6285		0.9893	0.9991	MG/KG	115		142	N	19		75 - 125	20	MS
Calcium		3686.3408		3525.5819		4281.9604		342.0616	399.6363	MG/KG	-47		149		19			20	P
Chromium	52	30.9586		37.0986		42.3015		9.8930	9.9909	MG/KG	62	N	114		13		75 - 125	20	MS
Cobalt	59	12.9243		64.9572		81.8255		49.4648	49.9545	MG/KG	105		138	N	23	*	75 - 125	20	MS
Copper	63	25.8325		28.4324		37.2661		9.8930	9.9909	MG/KG	26	N	114		27	*	75 - 125	20	MS
Iron		27872.1533		22827.0571		27037.2261		85.5154	99.9091	MG/KG	-5900		-836		17			20	P
Lead	208	12.0121		12.8074		17.2563		2.9679	2.9973	MG/KG	27		175		30	*		20	MS
Lithium		30.0617		108.7867		129.0875		85.5154	99.9091	MG/KG	92		99		17		82 - 114	20	P
Magnesium		6141.8373		5240.1845		6531.5293		171.0308	199.8182	MG/KG	-527		195		22	*		20	P
Manganese		370.5170		323.1943		413.7245		42.7577	49.9545	MG/KG	-111		86		25	*		20	P
Molybdenum	98	0.8145		12.0615		14.9544		9.8930	9.9909	MG/KG	114		142	N	21	*	75 - 125	20	MS
Nickel	60	23.5318		28.7885		35.8474		9.8930	9.9909	MG/KG	53	N	123		22	*	75 - 125	20	MS
Phosphorus		537.9454		543.5761		643.7412		85.5154	99.9091	MG/KG	7		106		17			20	P
Potassium		4085.9421		4224.1102		5255.1408		855.1540	999.0908	MG/KG	16		117		22	*		20	P
Selenium	78	0.1938	B	2.4000		2.7695		1.9786	1.9982	MG/KG	112		129	N	14		75 - 125	20	MS
Silver	107	0.0717	B	11.6025		14.1431		9.8930	9.9909	MG/KG	117		141	N	20		75 - 125	20	MS
Sodium		115.0244		942.6482		1101.4577		855.1540	999.0908	MG/KG	97		99		16		75 - 125	20	P
Strontium		17.6718		98.5642		116.9286		85.5154	99.9091	MG/KG	95		99		17		75 - 115	20	P
Thallium	203	0.4153		0.7932		0.9328		0.3957	0.3996	MG/KG	96		130	N	16		75 - 125	20	MS
Tin		3.3171	B	312.4707		360.1413		342.0616	399.6363	MG/KG	90		89		14		80 - 110	20	P
Titanium		1330.6345		1276.3439		1602.1091		85.5154	99.9091	MG/KG	-63		272		23	*		20	P
Vanadium	51	58.9707		57.1813		71.1153		9.8930	9.9909	MG/KG	-18		122		22	*		20	MS
Zinc	66	113.3602		99.6023		131.4804		9.8930	9.9909	MG/KG	-139		181		28	*		20	MS
Zirconium		3.8464	B	83.9761		97.1926		85.5154	99.9091	MG/KG	94		93		15		75 - 125	20	P

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

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

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE203
Matrix: SOIL Level (low/med): LOW

L5X (associated w/ 315)

Background Lab Sample ID: 6349712BKG
% Solids for Duplicate: 99.1
Batch ID(s): P20608C, P20626B
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6349712DUP
% Solids for Sample: 99.1

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			15398.7851		14834.3233		4		P
Antimony	121		0.1671	B	0.1414	B	17		MS
Arsenic	75		10.0888		9.1327		10		MS
Barium	137		156.3068		145.0922		7		MS
Beryllium	9		0.8650		0.8402		3		MS
Boron		4.9	5.7399		5.4364		5		P
Cadmium	111	0.1	0.2054		0.2187		6		MS
Calcium			3686.3408		3903.3591		6		P
Chromium	52		30.9586		30.0373		3		MS
Cobalt	59		12.9243		11.5682		11		MS
Copper	63		25.8325		21.0046		21	*	MS
Iron			27872.1533		25517.6444		9		P
Lead	208		12.0121		11.6858		3		MS
Lithium			30.0617		27.0977		10		P
Magnesium			6141.8373		5626.0246		9		P
Manganese			370.5170		318.1111		15		P
Molybdenum	98		0.8145		0.7767		5		MS
Nickel	60		23.5318		20.6127		13		MS
Phosphorus			537.9454		495.4203		8		P
Potassium			4085.9421		3440.0673		17		P
Selenium	78		0.1938	B	0.2379	B	20		MS
Silver	107		0.0717	B	0.0885	B	21		MS
Sodium		98.9	115.0244		227.2782		66	*	P
Strontium			17.6718		21.1635		18		P
Thallium	203	0.1	0.4153		0.3576		15		MS
Tin			3.3171	B	3.0156	B	10		P
Titanium			1330.6345		1209.5504		10		P
Vanadium	51		58.9707		54.9411		7		MS
Zinc	66		113.3602		109.1180		4		MS
Zirconium			3.8464	B	4.6398	B	19		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE203 7488

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

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE203
Matrix: SOIL Level (low/med): LOW

<5X

Background Lab Sample ID: 6349714BKG
% Solids for Duplicate: 99.0
Batch ID(s): P20711D
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6349714DUP
% Solids for Sample: 99.0

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury			0.0069	U	0.0094	B	200		CV

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE203 [illegible]

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE203
Matrix: SOIL Level (low/med): LOW

J/UJ (3-15)

Background Lab Sample ID: 6349712BKG Serial Dilution Lab Sample ID: 6349712L
Batch ID(s): P20608C, P20626B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		155654.0000		167907.1000		8		P
Antimony	121	0.8280	B	1.8500	U	100		MS
Arsenic	75	49.9900		37.1000		26	E	MS
Barium	137	774.5000		574.0000		26	E	MS
Beryllium	9	4.2860		3.4950		18		MS
Boron		58.0200		81.6000	B	41		P
Cadmium	111	1.0180		1.1000	U	100		MS
Calcium		37262.2700		40191.7500		8		P
Chromium	52	153.4000		131.4000		14	E	MS
Cobalt	59	64.0400		47.5550		26	E	MS
Copper	63	128.0000		97.6500		24	E	MS
Iron		56347.4600		56219.1000		0		P
Lead	208	59.5200		48.4700		19	E	MS
Lithium		303.8700		330.8500		9		P
Magnesium		62082.9200		65787.5500		6		P
Manganese		3745.2600		4041.3000		8		P
Molybdenum	98	4.0360		3.1720		21		MS
Nickel	60	116.6000		88.0500		24	E	MS
Phosphorus		5437.6600		5658.5500		4		P
Potassium		41301.5200		43529.3000		5		P
Selenium	78	0.9604	B	1.4500	U	100		MS
Silver	107	0.3553	B	0.3955	B	11		MS
Sodium		1162.6900		1205.9500	B	4		P
Strontium		178.6300		191.1000		7		P
Thallium	203	2.0580		1.7375	B	16		MS
Tin		33.5300	B	39.4000	B	18		P
Titanium		13450.3200		14561.5000		8		P
Vanadium	51	292.2000		242.5500		17	E	MS
Zinc	66	561.7000		444.5500		21	E	MS
Zirconium		38.8800	B	56.1000	B	44		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

DE203 7413

SAMPLE DELIVERY GROUP

DE204

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-Jul-2011	TB-072011	6351929	TB	5030B	8015M	III
20-Jul-2011	TB-072011	6351929	TB	5030B	8260B	III
20-Jul-2011	TB-072011	6351929	TB	5030B	8260B SIM	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3050B	6010B	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3050B	6020	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3060A	7199	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3550B	8015B	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3550B	8015M	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3550B	8081A	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3550B	8082	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3550B	8151A	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3550B	8270C	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	3550B	8270C SIM	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	METHOD	300.0	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	METHOD	314.0	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	METHOD	7471A	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	METHOD	8015B	III
20-Jul-2011	SL-167-SA6-SS-0.0-0.5	6351918	N	METHOD	8015M	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3050B	6010B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3050B	6020	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3060A	7199	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3550B	8015B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3550B	8015M	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3550B	8081A	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3550B	8082	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	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
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3550B	8270C	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	3550B	8270C SIM	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	METHOD	300.0	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	METHOD	314.0	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	METHOD	7471A	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	METHOD	8015B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5	6351911	N	METHOD	8015M	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3050B	6010B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3050B	6020	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3060A	7199	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3550B	8015B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3550B	8015M	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3550B	8081A	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3550B	8082	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3550B	8151A	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3550B	8270C	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	3550B	8270C SIM	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	METHOD	300.0	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	METHOD	314.0	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	METHOD	7471A	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	METHOD	8015B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MS	6351912	MS	METHOD	8015M	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3050B	6010B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3050B	6020	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3550B	8015B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3550B	8015M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3550B	8081A	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3550B	8082	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3550B	8151A	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3550B	8270C	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	3550B	8270C SIM	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	METHOD	7471A	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	METHOD	8015B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5MSD	6351913	MSD	METHOD	8015M	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5DUP	6351914	DUP	3050B	6010B	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5DUP	6351914	DUP	3050B	6020	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5DUP	6351914	DUP	3060A	7199	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5DUP	6351914	DUP	METHOD	300.0	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5DUP	6351914	DUP	METHOD	314.0	III
20-Jul-2011	SL-160-SA6-SS-0.0-0.5DUP	6351914	DUP	METHOD	7471A	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3050B	6010B	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3050B	6020	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3060A	7199	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3550B	8015B	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3550B	8015M	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3550B	8081A	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3550B	8082	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3550B	8151A	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3550B	8270C	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	3550B	8270C SIM	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	METHOD	300.0	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	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
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	METHOD	7471A	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	METHOD	8015B	III
20-Jul-2011	DUP04-SA6-QC-072011	6351925	FD	METHOD	8015M	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3050B	6010B	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3050B	6020	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3060A	7199	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3550B	8015B	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3550B	8015M	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3550B	8081A	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3550B	8082	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3550B	8151A	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3550B	8270C	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	3550B	8270C SIM	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	METHOD	300.0	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	METHOD	314.0	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	METHOD	6850	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	METHOD	7471A	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	METHOD	8015B	III
20-Jul-2011	SL-156-SA6-SS-0.0-0.5	6351908	N	METHOD	8015M	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3050B	6010B	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3050B	6020	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3060A	7199	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3550B	8015B	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3550B	8015M	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3550B	8081A	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	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
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3550B	8151A	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3550B	8270C	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	3550B	8270C SIM	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	METHOD	300.0	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	METHOD	314.0	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	METHOD	7471A	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	METHOD	8015B	III
20-Jul-2011	SL-164-SA6-SS-0.0-0.5	6351916	N	METHOD	8015M	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3050B	6010B	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3050B	6020	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3060A	7199	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3550B	8015B	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3550B	8015M	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3550B	8081A	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3550B	8082	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3550B	8151A	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3550B	8270C	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	3550B	8270C SIM	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	METHOD	300.0	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	METHOD	314.0	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	METHOD	7471A	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	METHOD	8015B	III
20-Jul-2011	SL-157-SA6-SS-0.0-0.5	6351909	N	METHOD	8015M	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3050B	6010B	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3050B	6020	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	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
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3550B	8015B	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3550B	8015M	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3550B	8081A	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3550B	8082	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3550B	8151A	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3550B	8270C	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	3550B	8270C SIM	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	METHOD	300.0	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	METHOD	314.0	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	METHOD	7471A	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	METHOD	8015B	III
20-Jul-2011	SL-159-SA6-SS-0.0-0.5	6351910	N	METHOD	8015M	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3050B	6010B	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3050B	6020	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3060A	7199	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3550B	8015B	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3550B	8015M	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3550B	8081A	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3550B	8082	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3550B	8151A	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3550B	8270C	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	3550B	8270C SIM	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	METHOD	300.0	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	METHOD	314.0	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	METHOD	7471A	III
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Jul-2011	SL-162-SA6-SS-0.0-0.5	6351915	N	METHOD	8015M	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3050B	6010B	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3050B	6020	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3060A	7199	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3550B	8015B	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3550B	8015M	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3550B	8081A	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3550B	8082	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3550B	8151A	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3550B	8270C	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	3550B	8270C SIM	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	METHOD	300.0	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	METHOD	314.0	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	METHOD	7471A	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	METHOD	8015B	III
20-Jul-2011	SL-321-SA6-SS-0.0-0.5	6351923	N	METHOD	8015M	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3050B	6010B	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3050B	6020	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3060A	7199	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3550B	8015B	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3550B	8015M	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3550B	8081A	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3550B	8082	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3550B	8151A	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	3550B	8270C	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	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
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	METHOD	300.0	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	METHOD	314.0	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	METHOD	7471A	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	METHOD	8015B	III
20-Jul-2011	SL-165-SA6-SS-0.0-0.5	6351917	N	METHOD	8015M	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3050B	6010B	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3050B	6020	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3060A	7199	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3550B	8015B	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3550B	8015M	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3550B	8081A	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3550B	8082	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3550B	8151A	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3550B	8270C	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	3550B	8270C SIM	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	METHOD	300.0	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	METHOD	314.0	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	METHOD	7471A	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	METHOD	8015B	III
20-Jul-2011	SL-322-SA6-SS-0.0-0.5	6351924	N	METHOD	8015M	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	3005A	6010B	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	3020A	6020	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	3510C	8015B	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	3510C	8015M	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	3510C	8082	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	3510C	8270C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	3510C	8270C SIM	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	3520C	1625C	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	5030B	8015M	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	5030B	8260B	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	5030B	8260B SIM	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	8330	8330A	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	Gen Prep	300.0	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	Gen Prep	314.0	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	Gen Prep	7199	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	Gen Prep	8015B	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	Gen Prep	8015M	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	METHOD	7470A	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	METHOD	8315A	III
20-Jul-2011	EB-SA6-SB-072011	6351930	EB	METHOD	9012B	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	3050B	6010B	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	3050B	6020	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	3060A	7199	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	3550B	8081A	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	3550B	8082	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	3550B	8151A	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	3550B	8270C	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	3550B	8270C SIM	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	METHOD	300.0	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	METHOD	314.0	III
20-Jul-2011	SL-218-SA6-SS-0.0-0.5	6351920	N	METHOD	7471A	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	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
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	3050B	6020	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	3060A	7199	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	3550B	8081A	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	3550B	8082	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	3550B	8151A	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	3550B	8270C	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	3550B	8270C SIM	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	METHOD	300.0	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	METHOD	314.0	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5	6351921	N	METHOD	7471A	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5DUP	P351921D270650B	DUP	METHOD	314.0	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5DUP	P351921D271800B	DUP	METHOD	300.0	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5MS	P351921R270736B	MS	METHOD	314.0	III
20-Jul-2011	SL-220-SA6-SS-0.0-0.5MS	P351921R271746B	MS	METHOD	300.0	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3050B	6010B	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3050B	6020	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3060A	7199	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3546	1625C	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3550B	8015B	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3550B	8015M	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3550B	8081A	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3550B	8082	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3550B	8151A	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3550B	8270C	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	3550B	8270C SIM	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	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
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	METHOD	300.0	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	METHOD	314.0	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	METHOD	7471A	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	METHOD	8015B	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	METHOD	8015M	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	METHOD	8315A	III
20-Jul-2011	SL-215-SA6-SS-0.0-0.5	6351919	N	METHOD	9012B	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	3050B	6010B	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	3050B	6020	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	3060A	7199	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	3550B	8081A	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	3550B	8082	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	3550B	8151A	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	3550B	8270C	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	3550B	8270C SIM	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	METHOD	300.0	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	METHOD	314.0	III
20-Jul-2011	SL-310-SA6-SS-0.0-0.5	6351922	N	METHOD	7471A	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	3050B	6010B	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	3050B	6020	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	3060A	7199	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	3546	1625C	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	3550B	8015B	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	3550B	8015M	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	3550B	8082	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	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
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	3550B	8270C SIM	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	5035	8015M	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	5035	8260B	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	5035	8260B SIM	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	8330	8330A	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	METHOD	300.0	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	METHOD	314.0	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	METHOD	6850	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	METHOD	7471A	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	METHOD	8015B	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	METHOD	8015M	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	METHOD	8315A	III
20-Jul-2011	SL-097-SA6-SB-1.5-2.5	6351928	N	METHOD	9012B	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	3050B	6010B	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	3050B	6020	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	3060A	7199	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	3550B	8015B	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	3550B	8015M	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	3550B	8082	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	3550B	8270C	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	3550B	8270C SIM	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	5035	8015M	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	5035	8260B	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	5035	8260B SIM	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	METHOD	300.0	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	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
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	METHOD	6850	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	METHOD	7471A	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	METHOD	8015B	III
20-Jul-2011	SL-086-SA6-SB-4.0-5.0	6351926	N	METHOD	8015M	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	3050B	6010B	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	3050B	6020	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	3060A	7199	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	3550B	8015B	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	3550B	8015M	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	3550B	8082	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	3550B	8270C	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	3550B	8270C SIM	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	5035	8015M	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	METHOD	300.0	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	METHOD	314.0	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	METHOD	6850	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	METHOD	7471A	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	METHOD	8015B	III
20-Jul-2011	SL-086-SA6-SB-9.0-10.0	6351927	N	METHOD	8015M	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP04-SA6-QC-072011 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-086-SA6-SB-4.0-5.0 ***Collected:*** 7/20/2011 2:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-086-SA6-SB-9.0-10.0 ***Collected:*** 7/20/2011 2:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.1		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-097-SA6-SB-1.5-2.5 ***Collected:*** 7/20/2011 2:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.85	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.85	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***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		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-157-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-159-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.81	MDL	1.0	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-160-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-162-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:51:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-164-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:57:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-165-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:24:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.80	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.80	MDL	1.5	PQL	mg/Kg	J	Z, Q

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.80	MDL	1.0	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-220-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 1:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-310-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 1:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-321-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-322-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 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	2.1		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** AQ

Sample ID: EB-SA6-SB-072011 *Collected:* 7/20/2011 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
BORON	0.0026	J	0.0022	MDL	0.0500	PQL	mg/L	U	B

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP04-SA6-QC-072011 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.34	J	0.356	MDL	4.95	PQL	mg/Kg	UJ	B, FD
SODIUM	90.3	J	5.89	MDL	99.0	PQL	mg/Kg	J	Z
TIN	2.28	J	0.317	MDL	9.90	PQL	mg/Kg	U	B
Zirconium	2.43	J	0.455	MDL	4.95	PQL	mg/Kg	U	B, B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-086-SA6-SB-4.0-5.0 **Collected:** 7/20/2011 2:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.49	J	0.376	MDL	5.22	PQL	mg/Kg	U	B
TIN	2.26	J	0.334	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.83	J	0.480	MDL	5.22	PQL	mg/Kg	U	B, B

Sample ID: SL-086-SA6-SB-9.0-10.0 **Collected:** 7/20/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.37	J	0.404	MDL	5.61	PQL	mg/Kg	U	B
TIN	2.51	J	0.359	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.27	J	0.516	MDL	5.61	PQL	mg/Kg	U	B, B

Sample ID: SL-097-SA6-SB-1.5-2.5 **Collected:** 7/20/2011 2:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.916	J	0.367	MDL	5.10	PQL	mg/Kg	U	B, F
TIN	2.30	J	0.326	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	3.66	J	0.469	MDL	5.10	PQL	mg/Kg	U	B

Sample ID: SL-156-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 8:31:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.00	J	0.359	MDL	4.98	PQL	mg/Kg	U	B
TIN	2.64	J	0.319	MDL	9.97	PQL	mg/Kg	U	B
Zirconium	3.16	J	0.459	MDL	4.98	PQL	mg/Kg	U	B, B

Sample ID: SL-157-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 9:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.79	J	0.361	MDL	5.02	PQL	mg/Kg	U	B
TIN	2.19	J	0.321	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	1.97	J	0.461	MDL	5.02	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-159-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.93	J	0.358	MDL	4.98	PQL	mg/Kg	U	B
SODIUM	90.8	J	5.92	MDL	99.5	PQL	mg/Kg	J	Z
TIN	2.45	J	0.319	MDL	9.95	PQL	mg/Kg	U	B
Zirconium	1.95	J	0.458	MDL	4.98	PQL	mg/Kg	U	B

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.18	J	0.725	MDL	10.1	PQL	mg/Kg	UJ	B, F, FD
TIN	2.04	J	0.645	MDL	20.1	PQL	mg/Kg	U	B

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	100	J	5.99	MDL	101	PQL	mg/Kg	J	Z
Zirconium	2.61	J	0.463	MDL	5.04	PQL	mg/Kg	U	B, B

Sample ID: SL-162-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.03	J	0.346	MDL	4.81	PQL	mg/Kg	U	B, F
TIN	4.50	J	0.308	MDL	9.62	PQL	mg/Kg	U	B
Zirconium	2.54	J	0.443	MDL	4.81	PQL	mg/Kg	U	B

Sample ID: SL-164-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.03	J	0.364	MDL	5.06	PQL	mg/Kg	U	B
TIN	2.36	J	0.324	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.99	J	0.466	MDL	5.06	PQL	mg/Kg	U	B

Sample ID: SL-165-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.33	J	0.354	MDL	4.92	PQL	mg/Kg	U	B, F

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-165-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 10:24:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	92.4	J	5.86	MDL	98.5	PQL	mg/Kg	J	Z
TIN	2.53	J	0.315	MDL	9.85	PQL	mg/Kg	U	B
Zirconium	2.20	J	0.453	MDL	4.92	PQL	mg/Kg	U	B

Sample ID: SL-167-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 8:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.52	J	0.362	MDL	5.03	PQL	mg/Kg	U	B
TIN	2.19	J	0.322	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.94	J	0.463	MDL	5.03	PQL	mg/Kg	U	B

Sample ID: SL-215-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 1:39:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.82	J	0.348	MDL	4.83	PQL	mg/Kg	U	B
TIN	2.40	J	0.309	MDL	9.66	PQL	mg/Kg	U	B
Zirconium	3.02	J	0.444	MDL	4.83	PQL	mg/Kg	U	B, B

Sample ID: SL-218-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 12:38:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.27	J	0.354	MDL	4.92	PQL	mg/Kg	U	B, F
SODIUM	72.6	J	5.85	MDL	98.4	PQL	mg/Kg	J	Z
TIN	2.57	J	0.315	MDL	9.84	PQL	mg/Kg	U	B
Zirconium	2.01	J	0.452	MDL	4.92	PQL	mg/Kg	U	B

Sample ID: SL-220-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 1:19:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.36	J	0.353	MDL	4.91	PQL	mg/Kg	U	B
SODIUM	83.8	J	5.84	MDL	98.2	PQL	mg/Kg	J	Z
TIN	2.81	J	0.314	MDL	9.82	PQL	mg/Kg	U	B
Zirconium	1.90	J	0.452	MDL	4.91	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-310-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 1:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.28	J	0.364	MDL	5.05	PQL	mg/Kg	U	B
SODIUM	71.4	J	6.01	MDL	101	PQL	mg/Kg	J	Z
TIN	2.40	J	0.323	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.78	J	0.465	MDL	5.05	PQL	mg/Kg	U	B

Sample ID: SL-321-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.98	J	0.352	MDL	4.89	PQL	mg/Kg	U	B
TIN	2.55	J	0.313	MDL	9.77	PQL	mg/Kg	U	B
Zirconium	2.41	J	0.449	MDL	4.89	PQL	mg/Kg	U	B

Sample ID: SL-322-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 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	1.87	J	0.357	MDL	4.96	PQL	mg/Kg	U	B
SODIUM	94.0	J	5.90	MDL	99.2	PQL	mg/Kg	J	Z
TIN	2.56	J	0.318	MDL	9.92	PQL	mg/Kg	U	B
Zirconium	2.16	J	0.456	MDL	4.96	PQL	mg/Kg	U	B, B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP04-SA6-QC-072011 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.224	J	0.0591	MDL	0.408	PQL	mg/Kg	J	Z, Q

Sample ID: DUP04-SA6-QC-072011 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.976		0.0510	MDL	0.102	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP04-SA6-QC-072011 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	160		0.108	MDL	0.408	PQL	mg/Kg	J	E, A

Sample ID: DUP04-SA6-QC-072011 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.172	J	0.0754	MDL	0.204	PQL	mg/Kg	UJ	Q, B
ARSENIC	10.1		0.0815	MDL	0.408	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.07		0.0163	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	0.147		0.0449	MDL	0.102	PQL	mg/Kg	J	Q, FD
CHROMIUM	37.0		0.122	MDL	0.408	PQL	mg/Kg	J	Q, E
COBALT	13.8		0.0204	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	19.9		0.0815	MDL	0.408	PQL	mg/Kg	J	Q, E
LEAD	11.5		0.0104	MDL	0.204	PQL	mg/Kg	J	Q, E
NICKEL	27.9		0.102	MDL	0.408	PQL	mg/Kg	J	Q, E, A
SILVER	0.0872	J	0.0145	MDL	0.102	PQL	mg/Kg	J	Z, Q, E, FD
THALLIUM	0.446		0.0306	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	66.7		0.0224	MDL	0.102	PQL	mg/Kg	J	E
ZINC	102		0.571	MDL	3.06	PQL	mg/Kg	J	E

Sample ID: SL-086-SA6-SB-4.0-5.0 ***Collected:*** 7/20/2011 2:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.316	J	0.0606	MDL	0.418	PQL	mg/Kg	J	Z, Q

Sample ID: SL-086-SA6-SB-4.0-5.0 ***Collected:*** 7/20/2011 2:40:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	4.11		0.0522	MDL	0.104	PQL	mg/Kg	J	Q, E

Sample ID: SL-086-SA6-SB-4.0-5.0 ***Collected:*** 7/20/2011 2:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	144		0.111	MDL	0.418	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-086-SA6-SB-4.0-5.0 ***Collected:*** 7/20/2011 2:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.163	J	0.0773	MDL	0.209	PQL	mg/Kg	UJ	Q, B
ARSENIC	27.4		0.0835	MDL	0.418	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.820		0.0167	MDL	0.104	PQL	mg/Kg	J	Q, E
CADMIUM	0.284		0.0459	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	28.8		0.125	MDL	0.418	PQL	mg/Kg	J	Q, E
COBALT	24.7		0.0209	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	36.5		0.0835	MDL	0.418	PQL	mg/Kg	J	Q, E
LEAD	12.8		0.0106	MDL	0.209	PQL	mg/Kg	J	Q, E
NICKEL	19.6		0.104	MDL	0.418	PQL	mg/Kg	J	Q, E, A
SILVER	0.0768	J	0.0148	MDL	0.104	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.380		0.0313	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	61.1		0.0230	MDL	0.104	PQL	mg/Kg	J	E
ZINC	101		0.585	MDL	3.13	PQL	mg/Kg	J	E

Sample ID: SL-086-SA6-SB-9.0-10.0 ***Collected:*** 7/20/2011 2:50:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0625	MDL	0.431	PQL	mg/Kg	J	Z, Q

Sample ID: SL-086-SA6-SB-9.0-10.0 ***Collected:*** 7/20/2011 2:50:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.891		0.0539	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-086-SA6-SB-9.0-10.0 ***Collected:*** 7/20/2011 2:50:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	145		0.114	MDL	0.431	PQL	mg/Kg	J	E, A

Sample ID: SL-086-SA6-SB-9.0-10.0 ***Collected:*** 7/20/2011 2:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0884	J	0.0798	MDL	0.216	PQL	mg/Kg	UJ	Q, B
ARSENIC	8.62		0.0862	MDL	0.431	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.938		0.0172	MDL	0.108	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: **SL-086-SA6-SB-9.0-10.0** ***Collected:*** **7/20/2011 2:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.141		0.0474	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	31.8		0.129	MDL	0.431	PQL	mg/Kg	J	Q, E
COBALT	11.9		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	15.2		0.0862	MDL	0.431	PQL	mg/Kg	J	Q, E
LEAD	8.54		0.0110	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	22.4		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E, A
SILVER	0.0443	J	0.0153	MDL	0.108	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.488		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	64.6		0.0237	MDL	0.108	PQL	mg/Kg	J	E
ZINC	88.8		0.604	MDL	3.23	PQL	mg/Kg	J	E

Sample ID: **SL-097-SA6-SB-1.5-2.5** ***Collected:*** **7/20/2011 2:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.190	J	0.0597	MDL	0.412	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-097-SA6-SB-1.5-2.5** ***Collected:*** **7/20/2011 2:05:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.56		0.0515	MDL	0.103	PQL	mg/Kg	J	Q, E

Sample ID: **SL-097-SA6-SB-1.5-2.5** ***Collected:*** **7/20/2011 2:05:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.109	MDL	0.412	PQL	mg/Kg	J	E, A

Sample ID: **SL-097-SA6-SB-1.5-2.5** ***Collected:*** **7/20/2011 2:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0762	MDL	0.206	PQL	mg/Kg	UJ	Q, B
ARSENIC	9.44		0.0824	MDL	0.412	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.834		0.0165	MDL	0.103	PQL	mg/Kg	J	Q, E
CADMIUM	0.266		0.0453	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	27.8		0.124	MDL	0.412	PQL	mg/Kg	J	Q, E
COBALT	13.1		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-097-SA6-SB-1.5-2.5 ***Collected:*** 7/20/2011 2:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	24.8		0.0824	MDL	0.412	PQL	mg/Kg	J	Q, E
LEAD	16.1		0.0105	MDL	0.206	PQL	mg/Kg	J	Q, E
NICKEL	21.0		0.103	MDL	0.412	PQL	mg/Kg	J	Q, E, A
SILVER	0.0783	J	0.0146	MDL	0.103	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.344		0.0309	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	63.3		0.0227	MDL	0.103	PQL	mg/Kg	J	E
ZINC	101		0.577	MDL	3.09	PQL	mg/Kg	J	E

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.211	J	0.0584	MDL	0.403	PQL	mg/Kg	J	Z, Q

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.825		0.0503	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***Analysis Type:*** REA4 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	156		0.267	MDL	1.01	PQL	mg/Kg	J	E, A

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.104	J	0.0745	MDL	0.201	PQL	mg/Kg	UJ	Q, B
ARSENIC	10.8		0.0805	MDL	0.403	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.32		0.0161	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	0.211		0.0443	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	42.0		0.121	MDL	0.403	PQL	mg/Kg	J	Q, E
COBALT	13.4		0.0201	MDL	0.101	PQL	mg/Kg	J	Q, E
COPPER	29.0		0.0805	MDL	0.403	PQL	mg/Kg	J	Q, E
LEAD	14.1		0.0103	MDL	0.201	PQL	mg/Kg	J	Q, E
NICKEL	31.7		0.101	MDL	0.403	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.104		0.0143	MDL	0.101	PQL	mg/Kg	J	Q, E
THALLIUM	0.466		0.0302	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	70.8		0.0221	MDL	0.101	PQL	mg/Kg	J	E
ZINC	117		0.564	MDL	3.02	PQL	mg/Kg	J	E

Sample ID: SL-157-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:14:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0565	MDL	0.390	PQL	mg/Kg	J	Z, Q

Sample ID: SL-157-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:14:00 ***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		0.0487	MDL	0.0974	PQL	mg/Kg	J	Q, E

Sample ID: SL-157-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:14:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.103	MDL	0.390	PQL	mg/Kg	J	E, A

Sample ID: SL-157-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0721	U	0.0721	MDL	0.195	PQL	mg/Kg	UJ	Q
ARSENIC	6.23		0.0779	MDL	0.390	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.597		0.0156	MDL	0.0974	PQL	mg/Kg	J	Q, E
CADMIUM	0.281		0.0429	MDL	0.0974	PQL	mg/Kg	J	Q
CHROMIUM	27.4		0.117	MDL	0.390	PQL	mg/Kg	J	Q, E
COBALT	10.0		0.0195	MDL	0.0974	PQL	mg/Kg	J	Q, E
COPPER	18.5		0.0779	MDL	0.390	PQL	mg/Kg	J	Q, E
LEAD	8.20		0.0099	MDL	0.195	PQL	mg/Kg	J	Q, E
NICKEL	15.5		0.0974	MDL	0.390	PQL	mg/Kg	J	Q, E, A
SILVER	0.0578	J	0.0138	MDL	0.0974	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.296		0.0292	MDL	0.0974	PQL	mg/Kg	J	Q
VANADIUM	40.9		0.0214	MDL	0.0974	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-157-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	78.8		0.546	MDL	2.92	PQL	mg/Kg	J	E

Sample ID: SL-159-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.255	J	0.0589	MDL	0.406	PQL	mg/Kg	J	Z, Q

Sample ID: SL-159-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:40:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.892		0.0508	MDL	0.102	PQL	mg/Kg	J	Q, E

Sample ID: SL-159-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.3		0.269	MDL	1.02	PQL	mg/Kg	J	E, A

Sample ID: SL-159-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.143	J	0.0751	MDL	0.203	PQL	mg/Kg	UJ	Q, B
ARSENIC	10.2		0.0812	MDL	0.406	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.05		0.0162	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	0.250		0.0447	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	38.4		0.122	MDL	0.406	PQL	mg/Kg	J	Q, E
COBALT	13.6		0.0203	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	25.1		0.0812	MDL	0.406	PQL	mg/Kg	J	Q, E
LEAD	12.5		0.0104	MDL	0.203	PQL	mg/Kg	J	Q, E
NICKEL	29.0		0.102	MDL	0.406	PQL	mg/Kg	J	Q, E, A
SILVER	0.0960	J	0.0144	MDL	0.102	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.466		0.0305	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	67.0		0.0223	MDL	0.102	PQL	mg/Kg	J	E
ZINC	132		0.569	MDL	3.05	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.150	J	0.0584	MDL	0.403	PQL	mg/Kg	J	Z, Q

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.690		0.0504	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.107	MDL	0.403	PQL	mg/Kg	J	E, A

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.119	J	0.0745	MDL	0.201	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.70		0.0806	MDL	0.403	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.965		0.0161	MDL	0.101	PQL	mg/Kg	J	Q, E
CADMIUM	0.0784	J	0.0443	MDL	0.101	PQL	mg/Kg	J	Z, Q, FD
CHROMIUM	29.0		0.121	MDL	0.403	PQL	mg/Kg	J	Q, E
COBALT	8.89		0.0201	MDL	0.101	PQL	mg/Kg	J	Q, E
COPPER	17.4		0.0806	MDL	0.403	PQL	mg/Kg	J	Q, E
LEAD	8.82		0.0103	MDL	0.201	PQL	mg/Kg	J	Q, E
NICKEL	20.9		0.101	MDL	0.403	PQL	mg/Kg	J	Q, E, A
SILVER	0.0379	J	0.0143	MDL	0.101	PQL	mg/Kg	J	Z, Q, E, FD
THALLIUM	0.350		0.0302	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	54.7		0.0222	MDL	0.101	PQL	mg/Kg	J	E
ZINC	81.5		0.564	MDL	3.02	PQL	mg/Kg	J	E

Sample ID: SL-162-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:51:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0580	MDL	0.400	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-162-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:51:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.532		0.0500	MDL	0.100	PQL	mg/Kg	J	Q, E

Sample ID: SL-162-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:51:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	117		0.106	MDL	0.400	PQL	mg/Kg	J	E, A

Sample ID: SL-162-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:51:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0740	MDL	0.200	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.61		0.0800	MDL	0.400	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.680		0.0160	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.221		0.0440	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	23.2		0.120	MDL	0.400	PQL	mg/Kg	J	Q, E
COBALT	9.55		0.0200	MDL	0.100	PQL	mg/Kg	J	Q, E
COPPER	16.3		0.0800	MDL	0.400	PQL	mg/Kg	J	Q, E
LEAD	10.4		0.0102	MDL	0.200	PQL	mg/Kg	J	Q, E
NICKEL	19.6		0.100	MDL	0.400	PQL	mg/Kg	J	Q, E, A
SILVER	0.0683	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.339		0.0300	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	60.2		0.0220	MDL	0.100	PQL	mg/Kg	J	E
ZINC	93.0		0.560	MDL	3.00	PQL	mg/Kg	J	E

Sample ID: SL-164-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:57:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.254	J	0.0576	MDL	0.397	PQL	mg/Kg	J	Z, Q

Sample ID: SL-164-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:57:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.950		0.0496	MDL	0.0993	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-164-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:57:00 ***Analysis Type:*** REA4 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	92.4		0.263	MDL	0.993	PQL	mg/Kg	J	E, A

Sample ID: SL-164-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:57:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.175	J	0.0735	MDL	0.199	PQL	mg/Kg	UJ	Q, B
ARSENIC	11.9		0.0794	MDL	0.397	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.08		0.0159	MDL	0.0993	PQL	mg/Kg	J	Q, E
CADMIUM	0.236		0.0437	MDL	0.0993	PQL	mg/Kg	J	Q
CHROMIUM	39.3		0.119	MDL	0.397	PQL	mg/Kg	J	Q, E
COBALT	15.5		0.0199	MDL	0.0993	PQL	mg/Kg	J	Q, E
COPPER	27.2		0.0794	MDL	0.397	PQL	mg/Kg	J	Q, E
LEAD	13.7		0.0101	MDL	0.199	PQL	mg/Kg	J	Q, E
NICKEL	31.3		0.0993	MDL	0.397	PQL	mg/Kg	J	Q, E, A
SILVER	0.116		0.0141	MDL	0.0993	PQL	mg/Kg	J	Q, E
THALLIUM	0.531		0.0298	MDL	0.0993	PQL	mg/Kg	J	Q
VANADIUM	69.8		0.0218	MDL	0.0993	PQL	mg/Kg	J	E
ZINC	116		0.556	MDL	2.98	PQL	mg/Kg	J	E

Sample ID: SL-165-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:24:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.293	J	0.0582	MDL	0.402	PQL	mg/Kg	J	Z, Q

Sample ID: SL-165-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:24:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.03		0.0502	MDL	0.100	PQL	mg/Kg	J	Q, E

Sample ID: SL-165-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 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
BARIUM	176		0.106	MDL	0.402	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-165-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:24:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.173	J	0.0743	MDL	0.201	PQL	mg/Kg	UJ	Q, B
ARSENIC	17.2		0.0803	MDL	0.402	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.05		0.0161	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.241		0.0442	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	35.7		0.120	MDL	0.402	PQL	mg/Kg	J	Q, E
COBALT	13.2		0.0201	MDL	0.100	PQL	mg/Kg	J	Q, E
COPPER	25.1		0.0803	MDL	0.402	PQL	mg/Kg	J	Q, E
LEAD	13.1		0.0102	MDL	0.201	PQL	mg/Kg	J	Q, E
NICKEL	26.3		0.100	MDL	0.402	PQL	mg/Kg	J	Q, E, A
SILVER	0.109		0.0143	MDL	0.100	PQL	mg/Kg	J	Q, E
THALLIUM	0.489		0.0301	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	68.0		0.0221	MDL	0.100	PQL	mg/Kg	J	E
ZINC	124		0.562	MDL	3.01	PQL	mg/Kg	J	E

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.257	J	0.0567	MDL	0.391	PQL	mg/Kg	J	Z, Q

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.817		0.0489	MDL	0.0977	PQL	mg/Kg	J	Q, E

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** REA4 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.259	MDL	0.977	PQL	mg/Kg	J	E, A

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.151	J	0.0723	MDL	0.195	PQL	mg/Kg	UJ	Q, B
ARSENIC	9.55		0.0782	MDL	0.391	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.818		0.0156	MDL	0.0977	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.251		0.0430	MDL	0.0977	PQL	mg/Kg	J	Q
CHROMIUM	31.8		0.117	MDL	0.391	PQL	mg/Kg	J	Q, E
COBALT	13.7		0.0195	MDL	0.0977	PQL	mg/Kg	J	Q, E
COPPER	31.3		0.0782	MDL	0.391	PQL	mg/Kg	J	Q, E
LEAD	12.2		0.010	MDL	0.195	PQL	mg/Kg	J	Q, E
NICKEL	23.6		0.0977	MDL	0.391	PQL	mg/Kg	J	Q, E, A
SILVER	0.0756	J	0.0139	MDL	0.0977	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.444		0.0293	MDL	0.0977	PQL	mg/Kg	J	Q
VANADIUM	64.9		0.0215	MDL	0.0977	PQL	mg/Kg	J	E
ZINC	128		0.547	MDL	2.93	PQL	mg/Kg	J	E

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** REA ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	200		1.41	MDL	7.53	PQL	mg/Kg	J	E

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.402		0.0582	MDL	0.402	PQL	mg/Kg	J	Q

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.97		0.0502	MDL	0.100	PQL	mg/Kg	J	Q, E

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** REA4 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.266	MDL	1.00	PQL	mg/Kg	J	E, A

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.259		0.0743	MDL	0.201	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	11.2		0.0803	MDL	0.402	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.33		0.0161	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	3.97		0.0442	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	53.0		0.120	MDL	0.402	PQL	mg/Kg	J	Q, E
COBALT	16.3		0.0201	MDL	0.100	PQL	mg/Kg	J	Q, E
COPPER	41.1		0.0803	MDL	0.402	PQL	mg/Kg	J	Q, E
LEAD	86.6		0.0102	MDL	0.201	PQL	mg/Kg	J	Q, E
NICKEL	52.3		0.100	MDL	0.402	PQL	mg/Kg	J	Q, E, A
SILVER	9.62		0.0143	MDL	0.100	PQL	mg/Kg	J	Q, E
THALLIUM	0.628		0.0301	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	81.8		0.0221	MDL	0.100	PQL	mg/Kg	J	E

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.194	J	0.0582	MDL	0.401	PQL	mg/Kg	J	Z, Q

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.18		0.0502	MDL	0.100	PQL	mg/Kg	J	Q, E

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***Analysis Type:*** REA4 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.266	MDL	1.00	PQL	mg/Kg	J	E, A

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.198	J	0.0742	MDL	0.201	PQL	mg/Kg	UJ	Q, B
ARSENIC	10.7		0.0803	MDL	0.401	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.11		0.0161	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.501		0.0441	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	38.1		0.120	MDL	0.401	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	12.6		0.0201	MDL	0.100	PQL	mg/Kg	J	Q, E
COPPER	34.0		0.0803	MDL	0.401	PQL	mg/Kg	J	Q, E
LEAD	27.9		0.0102	MDL	0.201	PQL	mg/Kg	J	Q, E
NICKEL	38.6		0.100	MDL	0.401	PQL	mg/Kg	J	Q, E, A
SILVER	0.466		0.0142	MDL	0.100	PQL	mg/Kg	J	Q, E
THALLIUM	0.494		0.0301	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	60.0		0.0221	MDL	0.100	PQL	mg/Kg	J	E
ZINC	131		0.562	MDL	3.01	PQL	mg/Kg	J	E

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***Analysis Type:*** REA ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	121		0.0496	MDL	0.972	PQL	mg/Kg	J	Q, E
ZINC	230		2.72	MDL	14.6	PQL	mg/Kg	J	E

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.316	J	0.0564	MDL	0.389	PQL	mg/Kg	J	Z, Q

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.69		0.0486	MDL	0.0972	PQL	mg/Kg	J	Q, E

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	154		0.103	MDL	0.389	PQL	mg/Kg	J	E, A

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.550		0.0719	MDL	0.194	PQL	mg/Kg	J	Q
ARSENIC	9.06		0.0778	MDL	0.389	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.786		0.0156	MDL	0.0972	PQL	mg/Kg	J	Q, E
CADMIUM	2.84		0.0428	MDL	0.0972	PQL	mg/Kg	J	Q
CHROMIUM	53.4		0.117	MDL	0.389	PQL	mg/Kg	J	Q, E
COBALT	13.4		0.0194	MDL	0.0972	PQL	mg/Kg	J	Q, E
COPPER	58.3		0.0778	MDL	0.389	PQL	mg/Kg	J	Q, E
NICKEL	76.0		0.0972	MDL	0.389	PQL	mg/Kg	J	Q, E, A
SILVER	3.26		0.0138	MDL	0.0972	PQL	mg/Kg	J	Q, E
THALLIUM	0.389		0.0292	MDL	0.0972	PQL	mg/Kg	J	Q
VANADIUM	52.5		0.0214	MDL	0.0972	PQL	mg/Kg	J	E

Sample ID: SL-310-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:51:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0563	MDL	0.389	PQL	mg/Kg	J	Z, Q

Sample ID: SL-310-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:51:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.684		0.0486	MDL	0.0971	PQL	mg/Kg	J	Q, E

Sample ID: SL-310-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:51:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	86.4		0.103	MDL	0.389	PQL	mg/Kg	J	E, A

Sample ID: SL-310-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:51:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0792	J	0.0719	MDL	0.194	PQL	mg/Kg	UJ	Q, B
ARSENIC	3.73		0.0777	MDL	0.389	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.481		0.0155	MDL	0.0971	PQL	mg/Kg	J	Q, E
CADMIUM	0.699		0.0427	MDL	0.0971	PQL	mg/Kg	J	Q
CHROMIUM	20.7		0.117	MDL	0.389	PQL	mg/Kg	J	Q, E
COBALT	5.53		0.0194	MDL	0.0971	PQL	mg/Kg	J	Q, E
COPPER	15.7		0.0777	MDL	0.389	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-310-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 1:51:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	68.5		0.0099	MDL	0.194	PQL	mg/Kg	J	Q, E
NICKEL	17.3		0.0971	MDL	0.389	PQL	mg/Kg	J	Q, E, A
SILVER	0.673		0.0138	MDL	0.0971	PQL	mg/Kg	J	Q, E
THALLIUM	0.205		0.0291	MDL	0.0971	PQL	mg/Kg	J	Q
VANADIUM	31.2		0.0214	MDL	0.0971	PQL	mg/Kg	J	E
ZINC	116		0.544	MDL	2.91	PQL	mg/Kg	J	E

Sample ID: SL-321-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 10:10:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.0572	MDL	0.395	PQL	mg/Kg	J	Z, Q

Sample ID: SL-321-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 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
MOLYBDENUM	1.03		0.0493	MDL	0.0987	PQL	mg/Kg	J	Q, E

Sample ID: SL-321-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 10:10:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	166		0.105	MDL	0.395	PQL	mg/Kg	J	E, A

Sample ID: SL-321-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 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	0.141	J	0.0730	MDL	0.197	PQL	mg/Kg	UJ	Q, B
ARSENIC	11.6		0.0789	MDL	0.395	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.13		0.0158	MDL	0.0987	PQL	mg/Kg	J	Q, E
CADMIUM	0.108		0.0434	MDL	0.0987	PQL	mg/Kg	J	Q
CHROMIUM	42.2		0.118	MDL	0.395	PQL	mg/Kg	J	Q, E
COBALT	13.0		0.0197	MDL	0.0987	PQL	mg/Kg	J	Q, E
COPPER	22.9		0.0789	MDL	0.395	PQL	mg/Kg	J	Q, E
LEAD	12.2		0.0101	MDL	0.197	PQL	mg/Kg	J	Q, E
NICKEL	29.4		0.0987	MDL	0.395	PQL	mg/Kg	J	Q, E, A
SILVER	0.0770	J	0.0140	MDL	0.0987	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-321-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 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
THALLIUM	0.476		0.0296	MDL	0.0987	PQL	mg/Kg	J	Q
VANADIUM	73.9		0.0217	MDL	0.0987	PQL	mg/Kg	J	E
ZINC	108		0.553	MDL	2.96	PQL	mg/Kg	J	E

Sample ID: SL-322-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:52:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.215	J	0.0564	MDL	0.389	PQL	mg/Kg	J	Z, Q

Sample ID: SL-322-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:52:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.933		0.0487	MDL	0.0973	PQL	mg/Kg	J	Q, E

Sample ID: SL-322-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:52:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	168		0.103	MDL	0.389	PQL	mg/Kg	J	E, A

Sample ID: SL-322-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:52:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.145	J	0.0720	MDL	0.195	PQL	mg/Kg	UJ	Q, B
ARSENIC	10.0		0.0779	MDL	0.389	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.02		0.0156	MDL	0.0973	PQL	mg/Kg	J	Q, E
CADMIUM	0.136		0.0428	MDL	0.0973	PQL	mg/Kg	J	Q
CHROMIUM	35.1		0.117	MDL	0.389	PQL	mg/Kg	J	Q, E
COBALT	12.8		0.0195	MDL	0.0973	PQL	mg/Kg	J	Q, E
COPPER	20.1		0.0779	MDL	0.389	PQL	mg/Kg	J	Q, E
LEAD	13.1		0.0099	MDL	0.195	PQL	mg/Kg	J	Q, E
NICKEL	25.7		0.0973	MDL	0.389	PQL	mg/Kg	J	Q, E, A
SILVER	0.0899	J	0.0138	MDL	0.0973	PQL	mg/Kg	J	Z, Q, E
THALLIUM	0.439		0.0292	MDL	0.0973	PQL	mg/Kg	J	Q
VANADIUM	64.3		0.0214	MDL	0.0973	PQL	mg/Kg	J	E
ZINC	112		0.545	MDL	2.92	PQL	mg/Kg	J	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP04-SA6-QC-072011 **Collected:** 7/20/2011 8:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, FD

Sample ID: SL-156-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 8:31:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-159-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 9:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-160-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 8:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, FD

Sample ID: SL-162-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 9:51:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.59	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-165-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 10:24:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-310-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 1:51:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.80	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-321-SA6-SS-0.0-0.5 **Collected:** 7/20/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-322-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 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
HEXAVALENT CHROMIUM	0.30	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

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

Sample ID: DUP04-SA6-QC-072011 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0079	J	0.0067	MDL	0.0950	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA6-SB-4.0-5.0 *Collected:* 7/20/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0206	J	0.0072	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0106	J	0.0070	MDL	0.0992	PQL	mg/Kg	J	Z

Sample ID: SL-157-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0074	J	0.0070	MDL	0.0991	PQL	mg/Kg	J	Z

Sample ID: SL-159-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0087	J	0.0070	MDL	0.0990	PQL	mg/Kg	J	Z

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0084	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: **SL-162-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 9:51:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0074	J	0.0067	MDL	0.0946	PQL	mg/Kg	J	Z

Sample ID: **SL-164-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 8:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0094	J	0.0070	MDL	0.0994	PQL	mg/Kg	J	Z

Sample ID: **SL-165-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 10:24:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0111	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: **SL-167-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 8:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0158	J	0.0067	MDL	0.0946	PQL	mg/Kg	J	Z

Sample ID: **SL-215-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 1:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0853	J	0.0070	MDL	0.0994	PQL	mg/Kg	J	Z

Sample ID: **SL-218-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 12:38:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0105	J	0.0070	MDL	0.100	PQL	mg/Kg	J	Z

Sample ID: **SL-220-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 1:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0868	J	0.0070	MDL	0.0994	PQL	mg/Kg	J	Z

Sample ID: **SL-310-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 1:51:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0506	J	0.0069	MDL	0.0980	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-322-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 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
MERCURY	0.0076	J	0.0070	MDL	0.0994	PQL	mg/Kg	J	Z

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

Sample ID: EB-SA6-SB-072011 *Collected:* 7/20/2011 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	6.29		0.521	MDL	1.04	PQL	ng/L	UJ	B, S

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

Sample ID: SL-097-SA6-SB-1.5-2.5 *Collected:* 7/20/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	287	J	174	MDL	349	PQL	ng/Kg	U	B

Sample ID: SL-215-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 1:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	317	J	167	MDL	335	PQL	ng/Kg	U	B

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

Sample ID: EB-SA6-SB-072011 *Collected:* 7/20/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLENE GLYCOL	20	U	20	MDL	200	PQL	mg/L	UJ	E

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

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

Sample ID: **SL-157-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 9:14:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.5	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: **SL-159-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 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
EFH (C8-C11)	0.42	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-160-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 8:15:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.1	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z, Q
EFH (C21-C30)	12		0.41	MDL	1.2	PQL	mg/Kg	J	Q
EFH (C8-C11)	1.2	J	0.41	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-160-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 8:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q
Propylene glycol	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q

Sample ID: **SL-162-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 9:51:00** ***Analysis Type:*** **REA** ***Dilution:*** **10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.2	J	4.0	MDL	12	PQL	mg/Kg	J	Z

Sample ID: **SL-164-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 8:57:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.86	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.51	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-165-SA6-SS-0.0-0.5** ***Collected:*** **7/20/2011 10:24:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.87	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-167-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:14:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.8	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Sample ID: SL-321-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.46	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-322-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:52:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.57	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP04-SA6-QC-072011 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.095	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z, FD

Sample ID: SL-157-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.25	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.095	U	0.095	MDL	0.35	PQL	ug/Kg	UJ	FD

Sample ID: SL-162-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:51:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	1.8	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.046	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.094	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***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'-DDD	0.65	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.16	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***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'-DDE	0.69	U	0.69	MDL	0.69	PQL	ug/Kg	R	S
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	R	S
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	R	S
BETA-BHC	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	R	S
Chlordane	0.81	U	0.81	MDL	3.4	PQL	ug/Kg	R	S
DELTA-BHC	0.052	U	0.052	MDL	0.17	PQL	ug/Kg	R	S
DIELDRIN	1.0	U	1.0	MDL	1.0	PQL	ug/Kg	R	S
ENDOSULFAN I	0.044	U	0.044	MDL	0.17	PQL	ug/Kg	R	S
ENDOSULFAN II	0.19	U	0.19	MDL	0.34	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.49	U	0.49	MDL	0.49	PQL	ug/Kg	R	S
ENDRIN	0.38	U	0.38	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	1.1	U	1.1	MDL	1.1	PQL	ug/Kg	R	S
ENDRIN KETONE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.084	U	0.084	MDL	0.17	PQL	ug/Kg	R	S
HEPTACHLOR	0.14	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z, S
HEPTACHLOR EPOXIDE	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	R	S
METHOXYCHLOR	5.3	U	5.3	MDL	5.3	PQL	ug/Kg	R	S
MIREX	0.92	U	0.92	MDL	0.92	PQL	ug/Kg	R	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-310-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:51:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	1.7	U	1.7	MDL	1.7	PQL	ug/Kg	UJ	S
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	8.1		0.81	MDL	3.4	PQL	ug/Kg	J	S
DELTA-BHC	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.044	U	0.044	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.69	U	0.69	MDL	0.69	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN	0.47	U	0.47	MDL	0.47	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.80	U	0.80	MDL	0.80	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.44	U	0.44	MDL	0.44	PQL	ug/Kg	UJ	S
TOXAPHENE	54	U	54	MDL	54	PQL	ug/Kg	UJ	S

Sample ID: SL-321-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
4,4'-DDE	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
4,4'-DDT	0.12	U	0.12	MDL	0.35	PQL	ug/Kg	UJ	S
ALDRIN	0.067	U	0.067	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	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	0.81	U	0.81	MDL	3.5	PQL	ug/Kg	UJ	S
DELTA-BHC	0.037	U	0.037	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.045	U	0.045	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-321-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	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	1.2	U	1.2	MDL	1.2	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.35	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.067	U	0.067	MDL	0.35	PQL	ug/Kg	UJ	S
TOXAPHENE	2.2	U	2.2	MDL	6.7	PQL	ug/Kg	UJ	S

Sample ID: SL-322-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:52:00 ***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	0.071	U	0.071	MDL	0.34	PQL	ug/Kg	UJ	S
4,4'-DDE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
4,4'-DDT	0.12	U	0.12	MDL	0.34	PQL	ug/Kg	UJ	S
ALDRIN	0.067	U	0.067	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	0.81	U	0.81	MDL	3.4	PQL	ug/Kg	UJ	S
DELTA-BHC	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.045	U	0.045	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.11	U	0.11	MDL	0.34	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.061	U	0.061	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.034	U	0.034	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	UJ	S
TOXAPHENE	2.2	U	2.2	MDL	6.7	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP04-SA6-QC-072011 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	FD

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***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	0.34	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-160-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.7	J	0.34	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SL-162-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:51:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.2	J	1.0	MDL	3.3	PQL	ug/Kg	J	Z

Sample ID: SL-164-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:57:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.52	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***Analysis Type:*** RES ***Dilution:*** 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	130	J	51	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-310-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:51:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	26	J	7.9	MDL	34	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP04-SA6-QC-072011 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	0.73	U	0.73	MDL	1.7	PQL	ug/Kg	UJ	FD
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L
MCPP	76	U	76	MDL	250	PQL	ug/Kg	UJ	FD

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***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	0.82	U	0.82	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-157-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.082	J	0.076	MDL	0.17	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-159-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-160-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.8		0.63	MDL	1.7	PQL	ug/Kg	J	FD
DICAMBA	0.41	U	0.41	MDL	1.2	PQL	ug/Kg	R	Q
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	Q, L
MCPP	740		76	MDL	250	PQL	ug/Kg	UJ	Q, B, FD

Sample ID: SL-162-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:51:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-164-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:57:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.2	J	0.63	MDL	1.7	PQL	ug/Kg	J	Z
DINOSEB	0.82	U	0.82	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-165-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:24:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	1.0	J	0.81	MDL	1.7	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** DL-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	4.0	U	4.0	MDL	12	PQL	ug/Kg	R	L

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***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	4.0	U	4.0	MDL	12	PQL	ug/Kg	R	L

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***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	4.0	U	4.0	MDL	12	PQL	ug/Kg	R	L

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.2	U	1.2	MDL	3.6	PQL	ug/Kg	R	S
DALAPON	4.4	U	4.4	MDL	9.1	PQL	ug/Kg	R	S
DICAMBA	0.64	J	0.40	MDL	1.2	PQL	ug/Kg	J	Z, S
DICHLOROPROP	0.81	U	0.81	MDL	1.7	PQL	ug/Kg	R	S

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-220-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 1:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	77	U	77	MDL	250	PQL	ug/Kg	R	S
MCPP	590		76	MDL	250	PQL	ug/Kg	UJ	B, S

Sample ID: SL-310-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 1:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	1.1	J	0.40	MDL	1.2	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-321-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	1.4	J	0.81	MDL	1.7	PQL	ug/Kg	J	Z
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-322-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:52:00 *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	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP04-SA6-QC-072011 *Collected:* 7/20/2011 8:15:00 *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	29	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-097-SA6-SB-1.5-2.5 *Collected:* 7/20/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	75	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	99	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	110	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	100	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-097-SA6-SB-1.5-2.5 ***Collected:*** 7/20/2011 2:05:00 ***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(K)FLUORANTHENE	68	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	78	J	18	MDL	180	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	27	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	71	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	84	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-156-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:31:00 ***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	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-157-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	17	MDL	330	PQL	ug/Kg	J	Z
FLUORANTHENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	23	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-160-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	R	Q, Q
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-162-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:51:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	35	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	35	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	36	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	28	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	22	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	54	J	17	MDL	330	PQL	ug/Kg	J	Z
CHRYSENE	41	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	80	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-162-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 9:51:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	22	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	76	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	95	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	110	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	31	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	44	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	81	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	47	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	33	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	170	J	17	MDL	330	PQL	ug/Kg	J	Z
Butylbenzylphthalate	18	J	17	MDL	170	PQL	ug/Kg	J	Z
CHRYSENE	83	J	17	MDL	170	PQL	ug/Kg	J	Z
Di-n-butylphthalate	30	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	120	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	40	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	94	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	130	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***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	25	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-220-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:19:00 ***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(G,H,I)PERYLENE	150	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	290	J	17	MDL	330	PQL	ug/Kg	J	Z
Butylbenzylphthalate	20	J	17	MDL	170	PQL	ug/Kg	J	Z
CARBAZOLE	97	J	17	MDL	170	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	49	J	17	MDL	170	PQL	ug/Kg	J	Z
DIBENZOFURAN	21	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	140	J	17	MDL	170	PQL	ug/Kg	J	Z
PENTACHLOROPHENOL	410	J	170	MDL	500	PQL	ug/Kg	J	Z

Sample ID: SL-310-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:51:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	23	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	100	J	17	MDL	340	PQL	ug/Kg	J	Z
CHRYSENE	28	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	37	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	21	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	41	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-321-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	23	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	79	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-322-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:52:00 ***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	21	J	17	MDL	340	PQL	ug/Kg	J	Z
FLUORANTHENE	40	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	24	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	43	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: EB-SA6-SB-072011 *Collected:* 7/20/2011 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-ETHYLHEXYL)PHTHALATE	0.27	J	0.054	MDL	1.1	PQL	ug/L	J	Z
Butylbenzylphthalate	0.18	J	0.054	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.22	J	0.054	MDL	1.1	PQL	ug/L	U	B
Di-n-octylphthalate	0.33	J	0.054	MDL	1.1	PQL	ug/L	U	B
NAPHTHALENE	0.046	J	0.033	MDL	0.054	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: DUP04-SA6-QC-072011 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.69	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	2.2		0.67	MDL	1.7	PQL	ug/Kg	J	FD
CHRYSENE	0.63	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.97	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.72	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, FD

Sample ID: SL-086-SA6-SB-4.0-5.0 *Collected:* 7/20/2011 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.96	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.83	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-097-SA6-SB-1.5-2.5 *Collected:* 7/20/2011 2:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.46	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.9	J	6.3	MDL	19	PQL	ug/Kg	J	Z
FLUORENE	0.86	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.77	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-156-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:31:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.69	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.93	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-157-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.62	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	6.0	J	6.0	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-159-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.83	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.87	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.92	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.98	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-160-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.67	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.67	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD
CHRYSENE	0.48	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.76	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.67	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory:** LL

EDD Filename: PrepDE204_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-164-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:57:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.79	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-165-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 10:24:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.6	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.68	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.76	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-167-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 8:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.49	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-215-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 1:39:00 ***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	1.7	MDL	8.4	PQL	ug/Kg	J	Z
ANTHRACENE	6.9	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z

Sample ID: SL-218-SA6-SS-0.0-0.5 ***Collected:*** 7/20/2011 12:38:00 ***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	0.69	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
Dimethylphthalate	11	J	6.0	MDL	18	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.3	J	6.0	MDL	18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-310-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 1:51:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.4	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	6.5	J	3.3	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.0	J	3.3	MDL	8.4	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.4	J	3.3	MDL	8.4	PQL	ug/Kg	J	Z
Di-n-butylphthalate	75	J	30	MDL	90	PQL	ug/Kg	J	Z

Sample ID: SL-321-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.93	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.73	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-322-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:52:00 *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	0.76	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.92	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-156-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	160	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-157-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	190	J	100	MDL	510	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: PrepDE204_v2 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-159-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	160	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-162-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 9:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	220	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-165-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 10:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	160	J	100	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-167-SA6-SS-0.0-0.5 *Collected:* 7/20/2011 8:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Isopropanol	220	J	100	MDL	510	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-086-SA6-SB-4.0-5.0 *Collected:* 7/20/2011 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	15		0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z

Sample ID: SL-097-SA6-SB-1.5-2.5 *Collected:* 7/20/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.2	J	7.1	MDL	8.5	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	10		0.25	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.08	MDL	4.3	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE204

Method Blank Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWA20B261436	8/9/2011 2:36:00 PM	N-NITROSODIMETHYLAMINE	2.04 ng/L	EB-SA6-SB-072011

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-SA6-SB-072011(RES)	N-NITROSODIMETHYLAMINE	6.29 ng/L	6.29U ng/L

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC20B261338	8/9/2011 1:38:00 PM	N-NITROSODIMETHYLAMINE	168 ng/Kg	SL-097-SA6-SB-1.5-2.5 SL-215-SA6-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-097-SA6-SB-1.5-2.5(RES)	N-NITROSODIMETHYLAMINE	287 ng/Kg	349U ng/Kg
SL-215-SA6-SS-0.0-0.5(RES)	N-NITROSODIMETHYLAMINE	317 ng/Kg	335U ng/Kg

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20848AB221837	7/28/2011 6:37:00 PM	BORON STRONTIUM Zirconium	0.0029 mg/L 0.00029 mg/L 0.0059 mg/L	EB-SA6-SB-072011

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-SA6-SB-072011(REA4)	BORON	0.0026 mg/L	0.0026U mg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20708FB220002	7/31/2011 12:02:00 AM	BORON	0.619 mg/Kg	DUP04-SA6-QC-072011
		CALCIUM	7.77 mg/Kg	SL-086-SA6-SB-4.0-5.0
		IRON	3.95 mg/Kg	SL-086-SA6-SB-9.0-10.0
		MAGNESIUM	0.951 mg/Kg	SL-097-SA6-SB-1.5-2.5
		MANGANESE	0.0396 mg/Kg	SL-156-SA6-SS-0.0-0.5
		PHOSPHORUS	1.25 mg/Kg	SL-157-SA6-SS-0.0-0.5
		STRONTIUM	0.0356 mg/Kg	SL-159-SA6-SS-0.0-0.5
		TIN	1.48 mg/Kg	SL-160-SA6-SS-0.0-0.5
		Zirconium	0.681 mg/Kg	SL-162-SA6-SS-0.0-0.5
				SL-164-SA6-SS-0.0-0.5
				SL-165-SA6-SS-0.0-0.5
				SL-167-SA6-SS-0.0-0.5
				SL-215-SA6-SS-0.0-0.5
				SL-218-SA6-SS-0.0-0.5
				SL-220-SA6-SS-0.0-0.5
				SL-310-SA6-SS-0.0-0.5
				SL-321-SA6-SS-0.0-0.5
				SL-322-SA6-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-SA6-QC-072011(RES)	BORON	2.34 mg/Kg	2.34U mg/Kg
DUP04-SA6-QC-072011(RES)	TIN	2.28 mg/Kg	2.28U mg/Kg
DUP04-SA6-QC-072011(RES)	Zirconium	2.43 mg/Kg	2.43U mg/Kg
SL-086-SA6-SB-4.0-5.0(RES)	BORON	1.49 mg/Kg	1.49U mg/Kg
SL-086-SA6-SB-4.0-5.0(RES)	TIN	2.26 mg/Kg	2.26U mg/Kg
SL-086-SA6-SB-4.0-5.0(RES)	Zirconium	1.83 mg/Kg	1.83U mg/Kg
SL-086-SA6-SB-9.0-10.0(RES)	BORON	1.37 mg/Kg	1.37U mg/Kg
SL-086-SA6-SB-9.0-10.0(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-086-SA6-SB-9.0-10.0(RES)	Zirconium	2.27 mg/Kg	2.27U mg/Kg
SL-097-SA6-SB-1.5-2.5(RES)	BORON	0.916 mg/Kg	0.916U mg/Kg
SL-097-SA6-SB-1.5-2.5(RES)	TIN	2.30 mg/Kg	2.30U mg/Kg
SL-156-SA6-SS-0.0-0.5(RES)	BORON	2.00 mg/Kg	2.00U mg/Kg
SL-156-SA6-SS-0.0-0.5(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-156-SA6-SS-0.0-0.5(RES)	Zirconium	3.16 mg/Kg	3.16U mg/Kg
SL-157-SA6-SS-0.0-0.5(RES)	BORON	1.79 mg/Kg	1.79U mg/Kg
SL-157-SA6-SS-0.0-0.5(RES)	TIN	2.19 mg/Kg	2.19U mg/Kg
SL-157-SA6-SS-0.0-0.5(RES)	Zirconium	1.97 mg/Kg	1.97U mg/Kg
SL-159-SA6-SS-0.0-0.5(RES)	BORON	1.93 mg/Kg	1.93U mg/Kg
SL-159-SA6-SS-0.0-0.5(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-159-SA6-SS-0.0-0.5(RES)	Zirconium	1.95 mg/Kg	1.95U mg/Kg
SL-160-SA6-SS-0.0-0.5(REA2)	BORON	1.18 mg/Kg	1.18U mg/Kg
SL-160-SA6-SS-0.0-0.5(REA2)	TIN	2.04 mg/Kg	2.04U mg/Kg
SL-160-SA6-SS-0.0-0.5(RES)	Zirconium	2.61 mg/Kg	2.61U mg/Kg
SL-162-SA6-SS-0.0-0.5(RES)	BORON	1.03 mg/Kg	1.03U mg/Kg
SL-162-SA6-SS-0.0-0.5(RES)	TIN	4.50 mg/Kg	4.50U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **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-162-SA6-SS-0.0-0.5(RES)	Zirconium	2.54 mg/Kg	2.54U mg/Kg
SL-164-SA6-SS-0.0-0.5(RES)	BORON	2.03 mg/Kg	2.03U mg/Kg
SL-164-SA6-SS-0.0-0.5(RES)	TIN	2.36 mg/Kg	2.36U mg/Kg
SL-164-SA6-SS-0.0-0.5(RES)	Zirconium	1.99 mg/Kg	1.99U mg/Kg
SL-165-SA6-SS-0.0-0.5(RES)	BORON	1.33 mg/Kg	1.33U mg/Kg
SL-165-SA6-SS-0.0-0.5(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-165-SA6-SS-0.0-0.5(RES)	Zirconium	2.20 mg/Kg	2.20U mg/Kg
SL-167-SA6-SS-0.0-0.5(RES)	BORON	1.52 mg/Kg	1.52U mg/Kg
SL-167-SA6-SS-0.0-0.5(RES)	TIN	2.19 mg/Kg	2.19U mg/Kg
SL-167-SA6-SS-0.0-0.5(RES)	Zirconium	1.94 mg/Kg	1.94U mg/Kg
SL-215-SA6-SS-0.0-0.5(RES)	BORON	2.82 mg/Kg	2.82U mg/Kg
SL-215-SA6-SS-0.0-0.5(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-215-SA6-SS-0.0-0.5(RES)	Zirconium	3.02 mg/Kg	3.02U mg/Kg
SL-218-SA6-SS-0.0-0.5(RES)	BORON	1.27 mg/Kg	1.27U mg/Kg
SL-218-SA6-SS-0.0-0.5(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-218-SA6-SS-0.0-0.5(RES)	Zirconium	2.01 mg/Kg	2.01U mg/Kg
SL-220-SA6-SS-0.0-0.5(RES)	BORON	2.36 mg/Kg	2.36U mg/Kg
SL-220-SA6-SS-0.0-0.5(RES)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-220-SA6-SS-0.0-0.5(RES)	Zirconium	1.90 mg/Kg	1.90U mg/Kg
SL-310-SA6-SS-0.0-0.5(RES)	BORON	2.28 mg/Kg	2.28U mg/Kg
SL-310-SA6-SS-0.0-0.5(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-310-SA6-SS-0.0-0.5(RES)	Zirconium	2.78 mg/Kg	2.78U mg/Kg
SL-321-SA6-SS-0.0-0.5(RES)	BORON	1.98 mg/Kg	1.98U mg/Kg
SL-321-SA6-SS-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-321-SA6-SS-0.0-0.5(RES)	Zirconium	2.41 mg/Kg	2.41U mg/Kg
SL-322-SA6-SS-0.0-0.5(RES)	BORON	1.87 mg/Kg	1.87U mg/Kg
SL-322-SA6-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-322-SA6-SS-0.0-0.5(RES)	Zirconium	2.16 mg/Kg	2.16U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20726BB220535A	7/29/2011 5:35:00 AM	COPPER LEAD VANADIUM	0.268 mg/Kg 0.0211 mg/Kg 0.0277 mg/Kg	DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13130AB241809A	8/3/2011 6:09:00 PM	MCPP	150 ug/Kg	DUP04-SA6-QC-072011 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-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-160-SA6-SS-0.0-0.5(RES)	MCPP	740 ug/Kg	740U ug/Kg
SL-220-SA6-SS-0.0-0.5(RES)	MCPP	590 ug/Kg	590U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB25B211049A	7/26/2011 10:49:00 AM	METHYLENE CHLORIDE	1.7 ug/Kg	SL-086-SA6-SB-4.0-5.0 SL-097-SA6-SB-1.5-2.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **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-086-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	15 ug/Kg	15U ug/Kg
SL-097-SA6-SB-1.5-2.5(RES)	METHYLENE CHLORIDE	10 ug/Kg	10U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC20B260551	7/30/2011 5:51:00 AM	Di-n-butylphthalate Di-n-octylphthalate	0.14 ug/L 0.28 ug/L	EB-SA6-SB-072011

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-SA6-SB-072011(RES)	Di-n-butylphthalate	0.22 ug/L	1.1U ug/L
EB-SA6-SB-072011(RES)	Di-n-octylphthalate	0.33 ug/L	1.1U ug/L

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-SA6-SB-072011(REA4)	7/20/2011 12:00:00 PM	BORON	0.0026 mg/L	DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-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-097-SA6-SB-1.5-2.5(RES)	BORON	0.916 mg/Kg	0.916U mg/Kg
SL-160-SA6-SS-0.0-0.5(REA2)	BORON	1.18 mg/Kg	1.18U mg/Kg
SL-162-SA6-SS-0.0-0.5(RES)	BORON	1.03 mg/Kg	1.03U mg/Kg
SL-165-SA6-SS-0.0-0.5(RES)	BORON	1.33 mg/Kg	1.33U mg/Kg
SL-218-SA6-SS-0.0-0.5(RES)	BORON	1.27 mg/Kg	1.27U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: DE204_v2. eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-160-SA6-SS-0.0-0.5MS SL-160-SA6-SS-0.0-0.5MSD (SL-160-SA6-SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	15 47 62	12 46 61	63.00-107.00 63.00-107.00 63.00-107.00	21 (20.00) - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	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
SL-160-SA6-SS-0.0-0.5MS SL-160-SA6-SS-0.0-0.5MSD (SL-160-SA6-SS-0.0-0.5)	DICAMBA MCPP	- -33	0 -15	10.00-190.00 10.00-184.00	200 (50.00) -	DICAMBA MCPP	J(all detects) R(all non-detects)
SL-160-SA6-SS-0.0-0.5MS SL-160-SA6-SS-0.0-0.5MSD (SL-160-SA6-SS-0.0-0.5)	DINOSEB	8	8	10.00-46.00	-	DINOSEB	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-160-SA6-SS-0.0-0.5MS (SL-160-SA6-SS-0.0-0.5)	EFH (C15-C20)	143	-	49.00-123.00	-	EFH (C15-C20)	J(all detects)
SL-160-SA6-SS-0.0-0.5MS SL-160-SA6-SS-0.0-0.5MSD (SL-160-SA6-SS-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	-30 -412	- -292	49.00-123.00 49.00-123.00	21 (20.00) -	EFH (C21-C30) EFH (C30-C40)	No qual, >4x
SL-160-SA6-SS-0.0-0.5MS SL-160-SA6-SS-0.0-0.5MSD (SL-160-SA6-SS-0.0-0.5)	EFH (C8-C11)	21	43	49.00-123.00	-	EFH (C8-C11)	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **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-160-SA6-SS-0.0-0.5MS **SL-160-SA6-SS-0.0-0.5MSD** (DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5)	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	463 177 201 296 198 252 359 301 196 220 392 468	425 185 195 301 199 259 358 315 197 235 384 449	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) V, Zn No qual, >4x
SL-160-SA6-SS-0.0-0.5MS **SL-160-SA6-SS-0.0-0.5MSD** (DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5)	ANTIMONY	63	65	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-160-SA6-SS-0.0-0.5MS **SL-160-SA6-SS-0.0-0.5MSD** (DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5)	SELENIUM	180	179	75.00-125.00	-	SELENIUM	J(all detects)

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

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **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-160-SA6-SS-0.0-0.5MS **SL-160-SA6-SS-0.0-0.5MSD** (DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5)	MOLYBDENUM	198	199	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-160-SA6-SS-0.0-0.5MS **SL-160-SA6-SS-0.0-0.5MSD** (DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5)	BARIUM	-185	-200	75.00-125.00	-	BARIUM	No qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **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-160-SA6-SS-0.0-0.5MS **SL-160-SA6-SS-0.0-0.5MSD** (DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5)	ALUMINUM CALCIUM TITANIUM	1047 - 231	1393 263 263	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM CALCIUM TITANIUM	No qual, >4x
SL-160-SA6-SS-0.0-0.5MS **SL-160-SA6-SS-0.0-0.5MSD** (DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5)	IRON MAGNESIUM	-1128 -87	-1140 -43	75.00-125.00 75.00-125.00	- -	IRON MAGNESIUM	No qual, >4x
SL-160-SA6-SS-0.0-0.5MS **SL-160-SA6-SS-0.0-0.5MSD** (DUP04-SA6-QC-072011 SL-086-SA6-SB-4.0-5.0 SL-086-SA6-SB-9.0-10.0 SL-097-SA6-SB-1.5-2.5 SL-156-SA6-SS-0.0-0.5 SL-157-SA6-SS-0.0-0.5 SL-159-SA6-SS-0.0-0.5 SL-160-SA6-SS-0.0-0.5 SL-162-SA6-SS-0.0-0.5 SL-164-SA6-SS-0.0-0.5 SL-165-SA6-SS-0.0-0.5 SL-167-SA6-SS-0.0-0.5 SL-215-SA6-SS-0.0-0.5 SL-218-SA6-SS-0.0-0.5 SL-220-SA6-SS-0.0-0.5 SL-310-SA6-SS-0.0-0.5 SL-321-SA6-SS-0.0-0.5 SL-322-SA6-SS-0.0-0.5)	MANGANESE PHOSPHORUS	- 69	45 -	75.00-125.00 75.00-125.00	- -	MANGANESE PHOSPHORUS	No qual, >4x

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

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **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-160-SA6-SS-0.0-0.5MS (SL-156-SA6-SS-0.0-0.5 SL -157-SA6-SS-0.0-0.5 SL -159-SA6-SS-0.0-0.5 SL -160-SA6-SS-0.0-0.5 SL -162-SA6-SS-0.0-0.5 SL -164-SA6-SS-0.0-0.5 SL -165-SA6-SS-0.0-0.5 SL -167-SA6-SS-0.0-0.5 SL -215-SA6-SS-0.0-0.5 SL -218-SA6-SS-0.0-0.5)	FLUORIDE Nitrate-NO3	46 75	- -	80.00-120.00 80.00-120.00	- -	FLUORIDE Nitrate-NO3	J(all detects) UJ(all non-detects)
SL-220-SA6-SS-0.0-0.5MS (DUP04-SA6-QC-072011 SL -086-SA6-SB-4.0-5.0 SL -086-SA6-SB-9.0-10.0 SL -097-SA6-SB-1.5-2.5 SL -220-SA6-SS-0.0-0.5 SL -310-SA6-SS-0.0-0.5 SL -321-SA6-SS-0.0-0.5 SL -322-SA6-SS-0.0-0.5)	FLUORIDE	41	-	80.00-120.00	-	FLUORIDE	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-160-SA6-SS-0.0-0.5MS SL-160-SA6-SS-0.0-0.5MSD (SL-160-SA6-SS-0.0-0.5)	2-METHYLPHENOL 4-CHLOROANILINE ACENAPHTHYLENE BIS(2-CHLOROETHOXY)METHA Di-n-octylphthalate	113 - - - 132	120 - 112 107 137	75.00-111.00 23.00-95.00 81.00-110.00 75.00-104.00 56.00-126.00	- 60 (30.00) - - -	2-METHYLPHENOL 4-CHLOROANILINE ACENAPHTHYLENE BIS(2-CHLOROETHOXY)METH Di-n-octylphthalate	J(all detects)
SL-160-SA6-SS-0.0-0.5MS SL-160-SA6-SS-0.0-0.5MSD (SL-160-SA6-SS-0.0-0.5)	BENZIDINE	0	16	35.00-141.00	200 (30.00)	BENZIDINE	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE204 Laboratory: LL

EDD Filename: DE204_v2. eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-160-SA6-SS-0.0-0.5DUP	ANTIMONY	43	20.00	
(DUP04 -SA6-QC-072011	ARSENIC	60	20.00	
SL -086-SA6-SB-4.0-5.0	BARIUM	27	20.00	
SL -086-SA6-SB-9.0-10.0	BERYLLIUM	26	20.00	
SL -097-SA6-SB-1.5-2.5	CADMIUM	62	20.00	J (all detects)
SL -156-SA6-SS-0.0-0.5	CHROMIUM	39	20.00	UJ (all non-detects)
SL -157-SA6-SS-0.0-0.5	COBALT	59	20.00	
SL -159-SA6-SS-0.0-0.5	COPPER	27	20.00	
SL -160-SA6-SS-0.0-0.5	LEAD	44	20.00	
SL -162-SA6-SS-0.0-0.5	MOLYBDENUM	53	20.00	Sb, Cd, Se, Ag, Tl
SL -164-SA6-SS-0.0-0.5	NICKEL	46	20.00	No Qual,
SL -165-SA6-SS-0.0-0.5	SELENIUM	52	20.00	OK by Difference
SL -167-SA6-SS-0.0-0.5	SILVER	70	20.00	
SL -215-SA6-SS-0.0-0.5	THALLIUM	35	20.00	
SL -218-SA6-SS-0.0-0.5	VANADIUM	40	20.00	
SL -220-SA6-SS-0.0-0.5	ZINC	33	20.00	
SL -310-SA6-SS-0.0-0.5				
SL -321-SA6-SS-0.0-0.5				
SL -322-SA6-SS-0.0-0.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-160-SA6-SS-0.0-0.5DUP	HEXAVALENT CHROMIUM	200	20.00	
(DUP04 -SA6-QC-072011				
SL -086-SA6-SB-4.0-5.0				
SL -086-SA6-SB-9.0-10.0				
SL -097-SA6-SB-1.5-2.5				
SL -156-SA6-SS-0.0-0.5				
SL -157-SA6-SS-0.0-0.5				
SL -159-SA6-SS-0.0-0.5				
SL -160-SA6-SS-0.0-0.5				
SL -162-SA6-SS-0.0-0.5				No Qual,
SL -164-SA6-SS-0.0-0.5				OK by Difference
SL -165-SA6-SS-0.0-0.5				
SL -167-SA6-SS-0.0-0.5				
SL -215-SA6-SS-0.0-0.5				
SL -218-SA6-SS-0.0-0.5				
SL -220-SA6-SS-0.0-0.5				
SL -310-SA6-SS-0.0-0.5				
SL -321-SA6-SS-0.0-0.5				
SL -322-SA6-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-220-SA6-SS-0.0-0.5DUP (DUP04-SA6-QC-072011 SL -086-SA6-SB-4.0-5.0 SL -086-SA6-SB-9.0-10.0 SL -097-SA6-SB-1.5-2.5 SL -220-SA6-SS-0.0-0.5 SL -310-SA6-SS-0.0-0.5 SL -321-SA6-SS-0.0-0.5 SL -322-SA6-SS-0.0-0.5)	Nitrate-NO3	200	20.00	No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12021AY321245A (EB-SA6-SB-072011)	ETHYLENE GLYCOL	-	-	80.00-124.00	26 (20.00)	ETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12076AQ241839A	3-NITROTOLUENE	110	110	69.00-107.00	-	3-NITROTOLUENE	
P12076AY241921A (EB-SA6-SB-072011)	PETN	129	129	80.00-120.00	-	PETN	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P12130AQ241836A (DUP04 -SA6-QC-072011 SL -156-SA6-SS-0.0-0.5 SL -157-SA6-SS-0.0-0.5 SL -159-SA6-SS-0.0-0.5 SL -160-SA6-SS-0.0-0.5 SL -162-SA6-SS-0.0-0.5 SL -164-SA6-SS-0.0-0.5 SL -165-SA6-SS-0.0-0.5 SL -167-SA6-SS-0.0-0.5 SL -215-SA6-SS-0.0-0.5 SL -218-SA6-SS-0.0-0.5 SL -220-SA6-SS-0.0-0.5 SL -310-SA6-SS-0.0-0.5 SL -321-SA6-SS-0.0-0.5 SL -322-SA6-SS-0.0-0.5)	DINOSEB	4	-	10.00-36.00	-	DINOSEB	J(all detects) R(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **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
P20726BQ220538A (DUP04 -SA6-QC-072011 SL -086-SA6-SB-4.0-5.0 SL -086-SA6-SB-9.0-10.0 SL -097-SA6-SB-1.5-2.5 SL -156-SA6-SS-0.0-0.5 SL -157-SA6-SS-0.0-0.5 SL -159-SA6-SS-0.0-0.5 SL -160-SA6-SS-0.0-0.5 SL -162-SA6-SS-0.0-0.5 SL -164-SA6-SS-0.0-0.5 SL -165-SA6-SS-0.0-0.5 SL -167-SA6-SS-0.0-0.5 SL -215-SA6-SS-0.0-0.5 SL -218-SA6-SS-0.0-0.5 SL -220-SA6-SS-0.0-0.5 SL -310-SA6-SS-0.0-0.5 SL -321-SA6-SS-0.0-0.5 SL -322-SA6-SS-0.0-0.5)	ANTIMONY	58	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC limits

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20708FQ220006	ALUMINUM	140	-	80.00-120.00	-	ALUMINUM	
(DUP04 -SA6-QC-072011	IRON	122	-	80.00-120.00	-	IRON	
SL -086-SA6-SB-4.0-5.0	TITANIUM	163	-	80.00-120.00	-	TITANIUM	
SL -086-SA6-SB-9.0-10.0 SL -097-SA6-SB-1.5-2.5 SL -156-SA6-SS-0.0-0.5 SL -157-SA6-SS-0.0-0.5 SL -159-SA6-SS-0.0-0.5 SL -160-SA6-SS-0.0-0.5 SL -162-SA6-SS-0.0-0.5 SL -164-SA6-SS-0.0-0.5 SL -165-SA6-SS-0.0-0.5 SL -167-SA6-SS-0.0-0.5 SL -215-SA6-SS-0.0-0.5 SL -218-SA6-SS-0.0-0.5 SL -220-SA6-SS-0.0-0.5 SL -310-SA6-SS-0.0-0.5 SL -321-SA6-SS-0.0-0.5 SL -322-SA6-SS-0.0-0.5)							No Qual, SRM within QC limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **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
P1LCLCSQ261352	BIS(2-CHLOROISOPROPYL) ET	117	-	62.00-115.00	-	BIS(2-CHLOROISOPROPYL) E	J(all detects)
(DUP04 -SA6-QC-072011	N-NITROSODIMETHYLAMINE	110	-	60.00-106.00	-	N-NITROSODIMETHYLAMINE	
SL -086-SA6-SB-4.0-5.0							
SL -086-SA6-SB-9.0-10.0							
SL -097-SA6-SB-1.5-2.5							
SL -156-SA6-SS-0.0-0.5							
SL -157-SA6-SS-0.0-0.5							
SL -159-SA6-SS-0.0-0.5							
SL -160-SA6-SS-0.0-0.5							
SL -162-SA6-SS-0.0-0.5							
SL -164-SA6-SS-0.0-0.5							
SL -165-SA6-SS-0.0-0.5							
SL -167-SA6-SS-0.0-0.5							
SL -215-SA6-SS-0.0-0.5							
SL -218-SA6-SS-0.0-0.5							
SL -220-SA6-SS-0.0-0.5							
SL -310-SA6-SS-0.0-0.5							
SL -321-SA6-SS-0.0-0.5							
SL -322-SA6-SS-0.0-0.5)							

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB25Q211111A	1,1,2-TRICHLORO-1,2,2-TRIFLU	140	134	61.00-126.00	-	1,1,2-TRICHLORO-1,2,2-TRIFL	J(all detects)
LCSB25Y211134A	1,1-DICHLOROETHENE	124	124	73.00-123.00	-	1,1-DICHLOROETHENE	
(SL-086-SA6-SB-4.0-5.0							
SL -097-SA6-SB-1.5-2.5)							

Field Duplicate RPD Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
MOISTURE	1.7	1.9	11		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
FLUORIDE	2.9	2.0	37	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
ALUMINUM	17600	16800	5	50.00	
CALCIUM	3050	2930	4	50.00	
IRON	25400	23100	9	50.00	
LITHIUM	30.9	28.1	9	50.00	
MAGNESIUM	6230	5630	10	50.00	
MANGANESE	313	292	7	50.00	
PHOSPHORUS	452	416	8	50.00	No Qualifiers Applied
POTASSIUM	3180	2730	15	50.00	
SODIUM	100	90.3	10	50.00	
STRONTIUM	18.1	17.5	3	50.00	
TIN	2.04	2.28	11	50.00	
TITANIUM	1140	1130	1	50.00	
Zirconium	2.61	2.43	7	50.00	
BORON	1.18	2.34	66	50.00	J(all detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
ANTIMONY	0.119	0.172	36	50.00	
ARSENIC	6.70	10.1	40	50.00	
BARIUM	128	160	22	50.00	
BERYLLIUM	0.965	1.07	10	50.00	
CHROMIUM	29.0	37.0	24	50.00	
COBALT	8.89	13.8	43	50.00	
COPPER	17.4	19.9	13	50.00	
LEAD	8.82	11.5	26	50.00	No Qualifiers Applied
MOLYBDENUM	0.690	0.976	34	50.00	
NICKEL	20.9	27.9	29	50.00	
SELENIUM	0.150	0.224	40	50.00	
THALLIUM	0.350	0.446	24	50.00	
VANADIUM	54.7	66.7	20	50.00	
ZINC	81.5	102	22	50.00	
CADMIUM	0.0784	0.147	61	50.00	J(all detects)
SILVER	0.0379	0.0872	79	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
HEXAVALENT CHROMIUM	0.45	0.26	54	50.00	J(all detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
MERCURY	0.0084	0.0079	6	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
EFH (C15-C20)	1.1	1.3	17	50.00	No Qualifiers Applied
EFH (C21-C30)	12	9.4	24	50.00	
EFH (C30-C40)	37	27	31	50.00	
EFH (C8-C11)	1.2	1.2	0	50.00	

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
4,4'-DDT	0.35 U	0.095	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
AROCLOR 1254	1.7	1.7 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
MCPA	540	350	43	50.00	No Qualifiers Applied
2,4-DB	1.8	1.7 U	200	50.00	J(all detects)
MCPP	740	250 U	200	50.00	UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: PrepDE204_v2 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
CHRYSENE	0.48	0.63	27	50.00	No Qualifiers Applied
FLUORANTHENE	0.76	0.97	24	50.00	
BENZO(B)FLUORANTHENE	1.7 U	0.69	200	50.00	J(all detects) UJ(all non-detects)
BENZO(K)FLUORANTHENE	1.7 U	2.2	200	50.00	
PHENANTHRENE	1.7 U	0.72	200	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
BIS(2-ETHYLHEXYL)PHTHALATE	31	29	7	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-160-SA6-SS-0.0-0.5	DUP04-SA6-QC-072011			
PH	6.91	6.70	3	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-SA6-SB-072011	BORON	J	0.0026	0.0500	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-SA6-SB-072011	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.27	1.1	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.18	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.22	1.1	PQL	ug/L	
	Di-n-octylphthalate	J	0.33	1.1	PQL	ug/L	
	NAPHTHALENE	J	0.046	0.054	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-097-SA6-SB-1.5-2.5	N-NITROSODIMETHYLAMINE	J	287	349	PQL	ng/Kg	J (all detects)
SL-215-SA6-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	317	335	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-097-SA6-SB-1.5-2.5	Nitrate-NO3	J	1.4	1.6	PQL	mg/Kg	J (all detects)
SL-215-SA6-SS-0.0-0.5	Nitrate-NO3	J	1.4	1.5	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA6-QC-072011	BORON	J	2.34	4.95	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.3	99.0	PQL	mg/Kg	
	TIN	J	2.28	9.90	PQL	mg/Kg	
	Zirconium	J	2.43	4.95	PQL	mg/Kg	
SL-086-SA6-SB-4.0-5.0	BORON	J	1.49	5.22	PQL	mg/Kg	J (all detects)
	TIN	J	2.26	10.4	PQL	mg/Kg	
	Zirconium	J	1.83	5.22	PQL	mg/Kg	
SL-086-SA6-SB-9.0-10.0	BORON	J	1.37	5.61	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	11.2	PQL	mg/Kg	
	Zirconium	J	2.27	5.61	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-097-SA6-SB-1.5-2.5	BORON	J	0.916	5.10	PQL	mg/Kg	J (all detects)
	TIN	J	2.30	10.2	PQL	mg/Kg	
	Zirconium	J	3.66	5.10	PQL	mg/Kg	
SL-156-SA6-SS-0.0-0.5	BORON	J	2.00	4.98	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	9.97	PQL	mg/Kg	
	Zirconium	J	3.16	4.98	PQL	mg/Kg	
SL-157-SA6-SS-0.0-0.5	BORON	J	1.79	5.02	PQL	mg/Kg	J (all detects)
	TIN	J	2.19	10.0	PQL	mg/Kg	
	Zirconium	J	1.97	5.02	PQL	mg/Kg	
SL-159-SA6-SS-0.0-0.5	BORON	J	1.93	4.98	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.8	99.5	PQL	mg/Kg	
	TIN	J	2.45	9.95	PQL	mg/Kg	
	Zirconium	J	1.95	4.98	PQL	mg/Kg	
SL-160-SA6-SS-0.0-0.5	BORON	J	1.18	10.1	PQL	mg/Kg	J (all detects)
	SODIUM	J	100	101	PQL	mg/Kg	
	TIN	J	2.04	20.1	PQL	mg/Kg	
	Zirconium	J	2.61	5.04	PQL	mg/Kg	
SL-162-SA6-SS-0.0-0.5	BORON	J	1.03	4.81	PQL	mg/Kg	J (all detects)
	TIN	J	4.50	9.62	PQL	mg/Kg	
	Zirconium	J	2.54	4.81	PQL	mg/Kg	
SL-164-SA6-SS-0.0-0.5	BORON	J	2.03	5.06	PQL	mg/Kg	J (all detects)
	TIN	J	2.36	10.1	PQL	mg/Kg	
	Zirconium	J	1.99	5.06	PQL	mg/Kg	
SL-165-SA6-SS-0.0-0.5	BORON	J	1.33	4.92	PQL	mg/Kg	J (all detects)
	SODIUM	J	92.4	98.5	PQL	mg/Kg	
	TIN	J	2.53	9.85	PQL	mg/Kg	
	Zirconium	J	2.20	4.92	PQL	mg/Kg	
SL-167-SA6-SS-0.0-0.5	BORON	J	1.52	5.03	PQL	mg/Kg	J (all detects)
	TIN	J	2.19	10.1	PQL	mg/Kg	
	Zirconium	J	1.94	5.03	PQL	mg/Kg	
SL-215-SA6-SS-0.0-0.5	BORON	J	2.82	4.83	PQL	mg/Kg	J (all detects)
	TIN	J	2.40	9.66	PQL	mg/Kg	
	Zirconium	J	3.02	4.83	PQL	mg/Kg	
SL-218-SA6-SS-0.0-0.5	BORON	J	1.27	4.92	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.6	98.4	PQL	mg/Kg	
	TIN	J	2.57	9.84	PQL	mg/Kg	
	Zirconium	J	2.01	4.92	PQL	mg/Kg	
SL-220-SA6-SS-0.0-0.5	BORON	J	2.36	4.91	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.8	98.2	PQL	mg/Kg	
	TIN	J	2.81	9.82	PQL	mg/Kg	
	Zirconium	J	1.90	4.91	PQL	mg/Kg	
SL-310-SA6-SS-0.0-0.5	BORON	J	2.28	5.05	PQL	mg/Kg	J (all detects)
	SODIUM	J	71.4	101	PQL	mg/Kg	
	TIN	J	2.40	10.1	PQL	mg/Kg	
	Zirconium	J	2.78	5.05	PQL	mg/Kg	
SL-321-SA6-SS-0.0-0.5	BORON	J	1.98	4.89	PQL	mg/Kg	J (all detects)
	TIN	J	2.55	9.77	PQL	mg/Kg	
	Zirconium	J	2.41	4.89	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-322-SA6-SS-0.0-0.5	BORON	J	1.87	4.96	PQL	mg/Kg	J (all detects)
	SODIUM	J	94.0	99.2	PQL	mg/Kg	
	TIN	J	2.56	9.92	PQL	mg/Kg	
	Zirconium	J	2.16	4.96	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA6-QC-072011	ANTIMONY	J	0.172	0.204	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.224	0.408	PQL	mg/Kg	
	SILVER	J	0.0872	0.102	PQL	mg/Kg	
SL-086-SA6-SB-4.0-5.0	ANTIMONY	J	0.163	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.316	0.418	PQL	mg/Kg	
	SILVER	J	0.0768	0.104	PQL	mg/Kg	
SL-086-SA6-SB-9.0-10.0	ANTIMONY	J	0.0884	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.152	0.431	PQL	mg/Kg	
	SILVER	J	0.0443	0.108	PQL	mg/Kg	
SL-097-SA6-SB-1.5-2.5	ANTIMONY	J	0.136	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.190	0.412	PQL	mg/Kg	
	SILVER	J	0.0783	0.103	PQL	mg/Kg	
SL-156-SA6-SS-0.0-0.5	ANTIMONY	J	0.104	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.211	0.403	PQL	mg/Kg	
SL-157-SA6-SS-0.0-0.5	SELENIUM	J	0.126	0.390	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0578	0.0974	PQL	mg/Kg	
SL-159-SA6-SS-0.0-0.5	ANTIMONY	J	0.143	0.203	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.255	0.406	PQL	mg/Kg	
	SILVER	J	0.0960	0.102	PQL	mg/Kg	
SL-160-SA6-SS-0.0-0.5	ANTIMONY	J	0.119	0.201	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0784	0.101	PQL	mg/Kg	
	SELENIUM	J	0.150	0.403	PQL	mg/Kg	
	SILVER	J	0.0379	0.101	PQL	mg/Kg	
SL-162-SA6-SS-0.0-0.5	ANTIMONY	J	0.101	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.129	0.400	PQL	mg/Kg	
	SILVER	J	0.0683	0.100	PQL	mg/Kg	
SL-164-SA6-SS-0.0-0.5	ANTIMONY	J	0.175	0.199	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.254	0.397	PQL	mg/Kg	
SL-165-SA6-SS-0.0-0.5	ANTIMONY	J	0.173	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.293	0.402	PQL	mg/Kg	
SL-167-SA6-SS-0.0-0.5	ANTIMONY	J	0.151	0.195	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.257	0.391	PQL	mg/Kg	
	SILVER	J	0.0756	0.0977	PQL	mg/Kg	
SL-218-SA6-SS-0.0-0.5	ANTIMONY	J	0.198	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.194	0.401	PQL	mg/Kg	
SL-220-SA6-SS-0.0-0.5	SELENIUM	J	0.316	0.389	PQL	mg/Kg	J (all detects)
SL-310-SA6-SS-0.0-0.5	ANTIMONY	J	0.0792	0.194	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.111	0.389	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-321-SA6-SS-0.0-0.5	ANTIMONY	J	0.141	0.197	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.184	0.395	PQL	mg/Kg	
	SILVER	J	0.0770	0.0987	PQL	mg/Kg	
SL-322-SA6-SS-0.0-0.5	ANTIMONY	J	0.145	0.195	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.215	0.389	PQL	mg/Kg	
	SILVER	J	0.0899	0.0973	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA6-QC-072011	HEXAVALENT CHROMIUM	J	0.26	1.0	PQL	mg/Kg	J (all detects)
SL-156-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.0	PQL	mg/Kg	J (all detects)
SL-159-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.31	1.0	PQL	mg/Kg	J (all detects)
SL-160-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.0	PQL	mg/Kg	J (all detects)
SL-162-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.0	PQL	mg/Kg	J (all detects)
SL-165-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.29	1.0	PQL	mg/Kg	J (all detects)
SL-310-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.80	1.0	PQL	mg/Kg	J (all detects)
SL-321-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.33	1.0	PQL	mg/Kg	J (all detects)
SL-322-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.30	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA6-QC-072011	MERCURY	J	0.0079	0.0950	PQL	mg/Kg	J (all detects)
SL-086-SA6-SB-4.0-5.0	MERCURY	J	0.0206	0.103	PQL	mg/Kg	J (all detects)
SL-156-SA6-SS-0.0-0.5	MERCURY	J	0.0106	0.0992	PQL	mg/Kg	J (all detects)
SL-157-SA6-SS-0.0-0.5	MERCURY	J	0.0074	0.0991	PQL	mg/Kg	J (all detects)
SL-159-SA6-SS-0.0-0.5	MERCURY	J	0.0087	0.0990	PQL	mg/Kg	J (all detects)
SL-160-SA6-SS-0.0-0.5	MERCURY	J	0.0084	0.101	PQL	mg/Kg	J (all detects)
SL-162-SA6-SS-0.0-0.5	MERCURY	J	0.0074	0.0946	PQL	mg/Kg	J (all detects)
SL-164-SA6-SS-0.0-0.5	MERCURY	J	0.0094	0.0994	PQL	mg/Kg	J (all detects)
SL-165-SA6-SS-0.0-0.5	MERCURY	J	0.0111	0.101	PQL	mg/Kg	J (all detects)
SL-167-SA6-SS-0.0-0.5	MERCURY	J	0.0158	0.0946	PQL	mg/Kg	J (all detects)
SL-215-SA6-SS-0.0-0.5	MERCURY	J	0.0853	0.0994	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-218-SA6-SS-0.0-0.5	MERCURY	J	0.0105	0.100	PQL	mg/Kg	J (all detects)
SL-220-SA6-SS-0.0-0.5	MERCURY	J	0.0868	0.0994	PQL	mg/Kg	J (all detects)
SL-310-SA6-SS-0.0-0.5	MERCURY	J	0.0506	0.0980	PQL	mg/Kg	J (all detects)
SL-322-SA6-SS-0.0-0.5	MERCURY	J	0.0076	0.0994	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-156-SA6-SS-0.0-0.5	Isopropanol	J	160	510	PQL	ug/Kg	J (all detects)
SL-157-SA6-SS-0.0-0.5	Isopropanol	J	190	510	PQL	ug/Kg	J (all detects)
SL-159-SA6-SS-0.0-0.5	Isopropanol	J	160	510	PQL	ug/Kg	J (all detects)
SL-162-SA6-SS-0.0-0.5	Isopropanol	J	220	510	PQL	ug/Kg	J (all detects)
SL-165-SA6-SS-0.0-0.5	Isopropanol	J	160	510	PQL	ug/Kg	J (all detects)
SL-167-SA6-SS-0.0-0.5	Isopropanol	J	220	510	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-157-SA6-SS-0.0-0.5	EFH (C15-C20)	J	2.5	6.1	PQL	mg/Kg	J (all detects)
SL-159-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.42	1.2	PQL	mg/Kg	J (all detects)
SL-160-SA6-SS-0.0-0.5	EFH (C15-C20)	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-162-SA6-SS-0.0-0.5	EFH (C15-C20)	J	4.2	12	PQL	mg/Kg	J (all detects)
SL-164-SA6-SS-0.0-0.5	EFH (C15-C20) EFH (C8-C11)	J J	0.86 0.51	1.2 1.2	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-165-SA6-SS-0.0-0.5	EFH (C15-C20)	J	0.87	1.2	PQL	mg/Kg	J (all detects)
SL-167-SA6-SS-0.0-0.5	EFH (C15-C20)	J	3.8	6.1	PQL	mg/Kg	J (all detects)
SL-321-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.46	1.2	PQL	mg/Kg	J (all detects)
SL-322-SA6-SS-0.0-0.5	EFH (C15-C20)	J	0.57	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA6-QC-072011	4,4'-DDT	J	0.095	0.35	PQL	ug/Kg	J (all detects)
SL-157-SA6-SS-0.0-0.5	4,4'-DDT	J	0.25	0.34	PQL	ug/Kg	J (all detects)
SL-162-SA6-SS-0.0-0.5	Chlordane gamma-BHC (Lindane)	J J	1.8 0.046	3.4 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-167-SA6-SS-0.0-0.5	MIREX	J	0.094	0.35	PQL	ug/Kg	J (all detects)
SL-215-SA6-SS-0.0-0.5	4,4'-DDD BETA-BHC	J J	0.65 0.16	1.7 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-220-SA6-SS-0.0-0.5	HEPTACHLOR	J	0.14	0.17	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-156-SA6-SS-0.0-0.5	AROCLOR 1254	J	1.1	1.7	PQL	ug/Kg	J (all detects)
SL-162-SA6-SS-0.0-0.5	Aroclor 5460	J	1.2	3.3	PQL	ug/Kg	J (all detects)
SL-164-SA6-SS-0.0-0.5	AROCLOR 1254	J	0.52	1.7	PQL	ug/Kg	J (all detects)
SL-220-SA6-SS-0.0-0.5	Aroclor 5460	J	130	170	PQL	ug/Kg	J (all detects)
SL-310-SA6-SS-0.0-0.5	AROCLOR 1260	J	26	34	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-157-SA6-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.082	0.17	PQL	ug/Kg	J (all detects)
SL-164-SA6-SS-0.0-0.5	2,4-DB	J	1.2	1.7	PQL	ug/Kg	J (all detects)
SL-165-SA6-SS-0.0-0.5	DICHLOROPROP	J	1.0	1.7	PQL	ug/Kg	J (all detects)
SL-220-SA6-SS-0.0-0.5	DICAMBA	J	0.64	1.2	PQL	ug/Kg	J (all detects)
SL-310-SA6-SS-0.0-0.5	DICAMBA	J	1.1	1.2	PQL	ug/Kg	J (all detects)
SL-321-SA6-SS-0.0-0.5	DICHLOROPROP	J	1.4	1.7	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-086-SA6-SB-4.0-5.0	TOLUENE	J	0.14	4.5	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-097-SA6-SB-1.5-2.5	ACETONE	J	8.2	8.5	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.14	4.3	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA6-QC-072011	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	340	PQL	ug/Kg	J (all detects)
SL-097-SA6-SB-1.5-2.5	BENZO(A)ANTHRACENE	J	75	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	99	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	110	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	100	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	68	180	PQL	ug/Kg	
	CHRYSENE	J	78	180	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	27	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	71	180	PQL	ug/Kg	
	PYRENE	J	84	180	PQL	ug/Kg	
SL-156-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	340	PQL	ug/Kg	J (all detects)
SL-157-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	330	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	18	170	PQL	ug/Kg	
	PYRENE	J	23	170	PQL	ug/Kg	
SL-160-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	340	PQL	ug/Kg	J (all detects)
SL-162-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	35	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	35	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	36	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	28	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	22	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	54	330	PQL	ug/Kg	
	CHRYSENE	J	41	170	PQL	ug/Kg	
	FLUORANTHENE	J	80	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	22	170	PQL	ug/Kg	
	PHENANTHRENE	J	76	170	PQL	ug/Kg	
	PYRENE	J	95	170	PQL	ug/Kg	
SL-167-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	110	340	PQL	ug/Kg	J (all detects)
SL-215-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	31	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	44	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	81	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	47	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	33	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	170	330	PQL	ug/Kg	
	Butylbenzylphthalate	J	18	170	PQL	ug/Kg	
	CHRYSENE	J	83	170	PQL	ug/Kg	
	Di-n-butylphthalate	J	30	170	PQL	ug/Kg	
	FLUORANTHENE	J	120	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	40	170	PQL	ug/Kg	
	PHENANTHRENE	J	94	170	PQL	ug/Kg	
	PYRENE	J	130	170	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-218-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	25	170	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	20	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	20	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	17	170	PQL	ug/Kg	
SL-220-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	150	170	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	290	330	PQL	ug/Kg	
	Butylbenzylphthalate	J	20	170	PQL	ug/Kg	
	CARBAZOLE	J	97	170	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	49	170	PQL	ug/Kg	
	DIBENZOFURAN	J	21	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	140	170	PQL	ug/Kg	
	PENTACHLOROPHENOL	J	410	500	PQL	ug/Kg	
SL-310-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	20	170	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	23	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	100	340	PQL	ug/Kg	
	CHRYSENE	J	28	170	PQL	ug/Kg	
	FLUORANTHENE	J	37	170	PQL	ug/Kg	
	PHENANTHRENE	J	21	170	PQL	ug/Kg	
	PYRENE	J	41	170	PQL	ug/Kg	
SL-321-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	23	170	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	79	340	PQL	ug/Kg	
SL-322-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	340	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	40	170	PQL	ug/Kg	
	PHENANTHRENE	J	24	170	PQL	ug/Kg	
	PYRENE	J	43	170	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA6-QC-072011	BENZO(B)FLUORANTHENE	J	0.69	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.63	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.97	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.72	1.7	PQL	ug/Kg	
SL-086-SA6-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	0.96	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.2	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	PYRENE	J	0.83	1.8	PQL	ug/Kg	
SL-097-SA6-SB-1.5-2.5	ACENAPHTHYLENE	J	0.46	1.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.9	19	PQL	ug/Kg	
	FLUORENE	J	0.86	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.77	1.8	PQL	ug/Kg	
SL-156-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.69	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.93	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE204 **Laboratory: LL**

EDD Filename: DE204_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-157-SA6-SS-0.0-0.5	ANTHRACENE	J	0.62	1.7	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	6.0	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.7	PQL	ug/Kg	
SL-159-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.83	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.87	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.92	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.98	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.7	PQL	ug/Kg	
SL-160-SA6-SS-0.0-0.5	CHRYSENE	J	0.48	1.7	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	0.76	1.7	PQL	ug/Kg	
SL-164-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.79	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.0	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.7	PQL	ug/Kg	
	PYRENE	J	1.3	1.7	PQL	ug/Kg	
SL-165-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.68	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.76	1.7	PQL	ug/Kg	
	PYRENE	J	1.2	1.7	PQL	ug/Kg	
SL-167-SA6-SS-0.0-0.5	ANTHRACENE	J	0.49	1.7	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.7	PQL	ug/Kg	
SL-215-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	1.9	8.4	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	6.9	8.4	PQL	ug/Kg	
SL-218-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	0.69	1.7	PQL	ug/Kg	J (all detects)
	Dimethylphthalate	J	11	18	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.3	18	PQL	ug/Kg	
SL-310-SA6-SS-0.0-0.5	ANTHRACENE	J	2.4	8.4	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	6.5	8.4	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.0	8.4	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.4	8.4	PQL	ug/Kg	
	Di-n-butylphthalate	J	75	90	PQL	ug/Kg	
SL-321-SA6-SS-0.0-0.5	CHRYSENE	J	0.93	1.7	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	0.73	1.7	PQL	ug/Kg	
SL-322-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	0.76	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.92	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.7	PQL	ug/Kg	

LDC #: 26407D4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-24-11
SDG #: DE204 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: MG

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	~~A~~ N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=19

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-156-SA6-SS-0.0-0.5	11	SL-220-SA6-SS-0.0-0.5	21	SL-160-SA6-SS-0.0-0.5MSD	31	
2	SL-157-SA6-SS-0.0-0.5	12	SL-310-SA6-SS-0.0-0.5	22	SL-160-SA6-SS-0.0-0.5DUP	32	
3	SL-159-SA6-SS-0.0-0.5	13	SL-321-SA6-SS-0.0-0.5	23		33	
4	SL-160-SA6-SS-0.0-0.5	14	SL-322-SA6-SS-0.0-0.5	24		34	
5	SL-162-SA6-SS-0.0-0.5	15	DUP04-SA6-QC-072011	25		35	
6	SL-164-SA6-SS-0.0-0.5	16	SL-086-SA6-SB-4.0-5.0	26		36	
7	SL-165-SA6-SS-0.0-0.5	17	SL-086-SA6-SB-9.0-10.0	27		37	
8	SL-167-SA6-SS-0.0-0.5	18	SL-097-SA6-SB-1.5-2.5	28		38	
9	SL-215-SA6-SS-0.0-0.5	19	EB-SA6-SB-072011	29		39	
10	SL-218-SA6-SS-0.0-0.5	20	SL-160-SA6-SS-0.0-0.5MS	30		40	

Notes: _____

LDC #: 26407D4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CF
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS:2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 4

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	4												
Zr	6.5	3.25	3.2	2.6												

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 9, 14-18

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	9	14	15	16	17	18								
Zr	9.2	4.6	3.0	2.2	2.4	1.8	2.3	3.7								

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

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	3	4	5	6	7	8	9	10	12	13	14	15	16	17	18
Sb	0.33	0.33	0.10	0.14	0.12	0.10	0.17	0.17	0.15	0.26	0.20	0.079	0.14	0.15	0.17	0.16	0.088	0.14

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 26407D4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: OR
2nd Reviewer: MG

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: 7/20/11 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	19	Action Level	4	5	7	10	18					
B	2.6	1.3	1.2	1.0	1.3	1.3	0.92					

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 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE204
Matrix: SOIL Level (low/med): LOW

74X

Background Lab Sample ID: 6351911BKG Matrix Spike Lab Sample ID: 6351912MS Matrix Spike Duplicate Lab Sample ID: 6351913MSD
% Solids for Sample: 98.3
Batch Id(s): P20708F, P20726B, P20711C

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum		17602.4939		19650.1154		20300.8245		195.6335	193.7703	MG/KG	1047		1393		3			20	P
Antimony	121	0.1194	B	0.8848		0.8919		1.2208	1.1852	MG/KG	63	N	65	N	1		75 - 125	20	MS
Arsenic	75	6.7021		16.1302		15.0974		2.0346	1.9753	MG/KG	463	N	425	N	7		75 - 125	20	MS
Barium	137	127.8366		109.0031		108.0998		10.1729	9.8766	MG/KG	-185		-200		1			20	MS
Beryllium	9	0.9653		2.4090		2.4297		0.8138	0.7901	MG/KG	177	N	185	N	1		75 - 125	20	MS
Boron		1.1845	B	179.2198		178.4237		195.6335	193.7703	MG/KG	91		91		0		84 - 115	20	P
Cadmium	111	0.0784	B	2.1241		2.0089		1.0173	0.9877	MG/KG	201	N	195	N	6		75 - 125	20	MS
Calcium		3053.8773		3536.0885		4072.0835		391.2669	387.5406	MG/KG	123		263		14			20	P
Chromium	52	29.0483		59.1862		58.7858		10.1729	9.8766	MG/KG	296	N	301	N	1		75 - 125	20	MS
Cobalt	59	8.8938		109.6033		107.3196		50.8647	49.3832	MG/KG	198	N	199	N	2		75 - 125	20	MS
Copper	63	17.3645		43.0315		42.9634		10.1729	9.8766	MG/KG	252	N	259	N	0		75 - 125	20	MS
Iron		25418.6890		24315.0863		24314.3448		97.8167	96.8851	MG/KG	-1128		-1140		0			20	P
Lead	208	8.8172		19.7782		19.4353		3.0519	2.9630	MG/KG	359	N	358	N	2		75 - 125	20	MS
Lithium		30.8633		124.5246		125.3665		97.8167	96.8851	MG/KG	96		98		1		82 - 114	20	P
Magnesium		6231.9833		6062.7025		6148.0172		195.6335	193.7703	MG/KG	-87		-43		1			20	P
Manganese		312.9619		357.1005		334.7847		48.9084	48.4426	MG/KG	90		45		6			20	P
Mercury		0.0084	B	0.1765		0.1840		0.1576	0.1688	MG/KG	107		104		4		65 - 135	20	CV
Molybdenum	98	0.6895		20.7935		20.3261		10.1729	9.8766	MG/KG	198	N	199	N	2		75 - 125	20	MS
Nickel	60	20.9099		51.4954		52.0499		10.1729	9.8766	MG/KG	301	N	315	N	1		75 - 125	20	MS
Phosphorus		451.9042		519.8235		529.0336		97.8167	96.8851	MG/KG	69		80		2			20	P
Potassium		3182.2044		4143.0550		4229.6333		978.1673	968.8514	MG/KG	98		108		2		75 - 125	20	P
Selenium	78	0.1499	B	3.8067		3.6919		2.0346	1.9753	MG/KG	180	N	179	N	3		75 - 125	20	MS
Silver	107	0.0379	B	19.9613		19.4570		10.1729	9.8766	MG/KG	196	N	197	N	3		75 - 125	20	MS
Sodium		100.0786	B	1031.5821		1030.7087		978.1673	968.8514	MG/KG	95		96		0		75 - 125	20	P
Strontium		18.1098		111.2538		111.5661		97.8167	96.8851	MG/KG	95		96		0		75 - 115	20	P
Thallium	203	0.3503		1.2450		1.2774		0.4069	0.3951	MG/KG	220	N	235	N	3		75 - 125	20	MS
Tin		2.0406	B	334.2456		348.1529		391.2669	387.5406	MG/KG	85		89		4		80 - 110	20	P
Titanium		1143.8474		1369.5790		1398.6591		97.8167	96.8851	MG/KG	231		263		2			20	P
Vanadium	51	54.6519		94.5270		92.5639		10.1729	9.8766	MG/KG	392		384		2			20	MS
Zinc	66	81.4842		129.1353		125.8086		10.1729	9.8766	MG/KG	468		449		3			20	MS
Zirconium		2.6057	B	95.7997		96.0384		97.8167	96.8851	MG/KG	95		96		0		75 - 125	20	P

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

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

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< 5xRL

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE204
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6351911BKG
% Solids for Duplicate: 98.2
Batch ID(s): P20708F, P20726B, P20711C
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6351914DUP
% Solids for Sample: 98.3

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			17602.4939		18548.6346		5		P
Antimony -	121		0.1194	B	0.1851	B	43		MS
Arsenic	75		6.7021		12.3866		60	*	MS
Barium	137		127.8366		96.9481		27	*	MS
Beryllium	9		0.9653		1.2509		26	*	MS
Boron			1.1845	B	1.0333	B	14		P
Cadmium -	111	0.1	0.0784	B	0.1490		62		MS
Calcium			3053.8773		3359.0230		10		P
Chromium	52		29.0483		43.2960		39	*	MS
Cobalt	59		8.8938		16.2523		59	*	MS
Copper	63		17.3645		22.8281		27	*	MS
Iron			25418.6890		26405.7567		4		P
Lead	208		8.8172		13.8637		44	*	MS
Lithium			30.8633		31.4673		2		P
Magnesium			6231.9833		6301.4920		1		P
Manganese			312.9619		300.2803		4		P
Mercury			0.0084	B	0.0077	B	9		CV
Molybdenum	98		0.6895		1.1915		53	*	MS
Nickel	60		20.9099		33.3062		46	*	MS
Phosphorus			451.9042		461.3209		2		P
Potassium			3182.2044		2955.8275		7		P
Selenium -	78		0.1499	B	0.2566	B	52		MS
Silver -	107		0.0379	B	0.0790	B	70		MS
Sodium		100.7	100.0786	B	106.3142		6		P
Strontium			18.1098		20.5174		12		P
Thallium -	203	0.1	0.3503		0.4968		35	*	MS
Tin			2.0406	B	2.1842	B	7		P
Titanium			1143.8474		1175.0244		3		P
Vanadium	51		54.6519		81.8718		40	*	MS
Zinc	66		81.4842		113.2452		33	*	MS
Zirconium			2.6057	B	3.0299	B	15		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

DE204 7526

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE204
Matrix: SOIL Level (low/med): LOW

3/55

Background Lab Sample ID: 6351911BKG Serial Dilution Lab Sample ID: 6351911L
Batch ID(s): P20708F, P20726B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		87381.4200		80184.7500		8		P
Antimony	121	0.5929	B	1.8500	U	100		MS
Arsenic	75	33.2700		29.8400		10		MS
Barium	137	634.6000		551.5000		13	E	MS
Beryllium	9	4.7920		4.6425		3		MS
Boron		5.8800	B	18.0000	U	100		P
Cadmium	111	0.3891	B	1.1000	U	100		MS
Calcium		30319.8100		31367.1500		3		P
Chromium	52	144.2000		146.5500		2		MS
Cobalt	59	44.1500		39.5300		10		MS
Copper	63	86.2000		80.0000		7		MS
Iron		252364.3700		251262.3000		0		P
Lead	208	43.7700		41.8850		4		MS
Lithium		306.4200		305.0000		0		P
Magnesium		61873.0000		63059.7500		2		P
Manganese		3107.1800		3240.5500		4		P
Molybdenum	98	3.4230		3.0600		11		MS
Nickel	60	103.8000		91.4000		12	E	MS
Phosphorus		2243.3200		2227.8000		1		P
Potassium		15796.9400		15984.8500		1		P
Selenium	78	0.7442	B	1.4500	U	100		MS
Silver	107	0.1883	B	0.3550	U	100		MS
Sodium		993.6100	B	797.8500	B	20		P
Strontium		179.8000		183.9000		2		P
Thallium	203	1.7390		1.8470	B	6		MS
Tin		10.1300	B	16.0000	U	100		P
Titanium		5678.2300		5777.5500		2		P
Vanadium	51	271.3000		273.4000		1		MS
Zinc	66	404.5000		377.1000		7		MS
Zirconium		25.8700	B	58.8000	B	127		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

DE204 7529

SAMPLE DELIVERY GROUP

DE205

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-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	3050B	6010B	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	3050B	6020	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	3550B	8081A	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	3550B	8082	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	3550B	8151A	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	3550B	8270C	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	3550B	8270C SIM	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	Gen Prep	7199	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	METHOD	300.0	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	METHOD	314.0	IV
21-Jul-2011	SL-214-SA6-SS-0.0-0.5	6352975	N	METHOD	7471A	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3050B	6010B	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3050B	6020	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3550B	8015B	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3550B	8015M	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3550B	8081A	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3550B	8082	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3550B	8151A	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3550B	8270C	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	3550B	8270C SIM	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	Gen Prep	7199	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	METHOD	300.0	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	METHOD	314.0	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	METHOD	6850	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	METHOD	7471A	IV
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	METHOD	8015B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Jul-2011	SL-219-SA6-SS-0.0-0.5	6352977	N	METHOD	8015M	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3050B	6010B	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3050B	6020	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3550B	8015B	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3550B	8015M	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3550B	8081A	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3550B	8082	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3550B	8151A	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3550B	8270C	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	3550B	8270C SIM	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	Gen Prep	7199	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	METHOD	300.0	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	METHOD	314.0	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	METHOD	7471A	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	METHOD	8015B	IV
21-Jul-2011	SL-216-SA6-SS-0.0-0.5	6352976	N	METHOD	8015M	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	3050B	6010B	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	3050B	6020	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	3550B	8081A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	3550B	8082	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	3550B	8151A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	3550B	8270C	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	3550B	8270C SIM	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	Gen Prep	7199	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	METHOD	300.0	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	METHOD	314.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	METHOD	6850	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5	6352971	N	METHOD	7471A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	3050B	6010B	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	3050B	6020	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	3550B	8081A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	3550B	8082	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	3550B	8151A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	3550B	8270C	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	3550B	8270C SIM	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	Gen Prep	7199	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	METHOD	300.0	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	METHOD	314.0	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	METHOD	6850	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MS	6352972	MS	METHOD	7471A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	3050B	6010B	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	3050B	6020	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	3550B	8081A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	3550B	8082	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	3550B	8151A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	3550B	8270C	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	3550B	8270C SIM	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	METHOD	6850	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5MSD	6352973	MSD	METHOD	7471A	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5DUP	6352974	DUP	3050B	6010B	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5DUP	6352974	DUP	3050B	6020	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5DUP	6352974	DUP	Gen Prep	7199	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Jul-2011	SL-211-SA6-SS-0.0-0.5DUP	6352974	DUP	METHOD	300.0	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5DUP	6352974	DUP	METHOD	314.0	IV
21-Jul-2011	SL-211-SA6-SS-0.0-0.5DUP	6352974	DUP	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: DE205 **Laboratory:** LL

EDD Filename: PrepDE205_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *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		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.80	U	0.80	MDL	1.0	PQL	mg/Kg	UJ	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3810		11.1	MDL	49.1	PQL	mg/Kg	J	Q
SODIUM	80.0	J	5.84	MDL	98.2	PQL	mg/Kg	J	Z
TIN	2.95	J	0.314	MDL	9.82	PQL	mg/Kg	U	B
Zirconium	4.12	J	0.452	MDL	4.91	PQL	mg/Kg	J	Z

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2930		11.4	MDL	50.7	PQL	mg/Kg	J	Q
SODIUM	85.6	J	6.03	MDL	101	PQL	mg/Kg	J	Z
TIN	3.31	J	0.324	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	3.73	J	0.466	MDL	5.07	PQL	mg/Kg	U	B

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory:** LL

EDD Filename: PrepDE205_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4370		11.1	MDL	49.0	PQL	mg/Kg	J	Q
SODIUM	72.4	J	5.83	MDL	98.0	PQL	mg/Kg	J	Z
TIN	3.31	J	0.313	MDL	9.80	PQL	mg/Kg	U	B
Zirconium	3.60	J	0.451	MDL	4.90	PQL	mg/Kg	U	B

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4140		11.4	MDL	50.6	PQL	mg/Kg	J	Q
SODIUM	57.3	J	6.02	MDL	101	PQL	mg/Kg	J	Z
TIN	2.84	J	0.324	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	3.19	J	0.465	MDL	5.06	PQL	mg/Kg	U	B, B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.190	J	0.0586	MDL	0.404	PQL	mg/Kg	J	Z

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.750		0.0506	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.170	J	0.0748	MDL	0.202	PQL	mg/Kg	J	Z, Q
ARSENIC	5.00		0.0809	MDL	0.404	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.770		0.0162	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	0.761		0.0445	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	27.0		0.121	MDL	0.404	PQL	mg/Kg	J	Q
COBALT	7.23		0.0202	MDL	0.101	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: PrepDE205_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	19.1		0.0809	MDL	0.404	PQL	mg/Kg	J	Q
LEAD	40.2		0.0103	MDL	0.202	PQL	mg/Kg	J	E
NICKEL	21.7		0.101	MDL	0.404	PQL	mg/Kg	J	Q
SILVER	1.19		0.0144	MDL	0.101	PQL	mg/Kg	J	Q
THALLIUM	0.395		0.0303	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	42.4		0.0222	MDL	0.101	PQL	mg/Kg	J	E

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* REA *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	188		0.0507	MDL	0.993	PQL	mg/Kg	J	E

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.173	J	0.0576	MDL	0.397	PQL	mg/Kg	J	Z

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.07		0.0497	MDL	0.0993	PQL	mg/Kg	J	Q, E

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.540		0.0735	MDL	0.199	PQL	mg/Kg	J	Q
ARSENIC	6.34		0.0795	MDL	0.397	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.762		0.0159	MDL	0.0993	PQL	mg/Kg	J	Q
CADMIUM	3.64		0.0437	MDL	0.0993	PQL	mg/Kg	J	Q
CHROMIUM	45.6		0.119	MDL	0.397	PQL	mg/Kg	J	Q
COBALT	14.0		0.0199	MDL	0.0993	PQL	mg/Kg	J	Q
COPPER	54.4		0.0795	MDL	0.397	PQL	mg/Kg	J	Q
NICKEL	44.2		0.0993	MDL	0.397	PQL	mg/Kg	J	Q
SILVER	3.49		0.0141	MDL	0.0993	PQL	mg/Kg	J	Q
THALLIUM	0.307		0.0298	MDL	0.0993	PQL	mg/Kg	J	Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: PrepDE205_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	47.1		0.0219	MDL	0.0993	PQL	mg/Kg	J	E

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.175	J	0.0585	MDL	0.404	PQL	mg/Kg	J	Z

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.917		0.0504	MDL	0.101	PQL	mg/Kg	J	Q, E

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.178	J	0.0747	MDL	0.202	PQL	mg/Kg	J	Z, Q
ARSENIC	6.23		0.0807	MDL	0.404	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.789		0.0161	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	1.59		0.0444	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	30.7		0.121	MDL	0.404	PQL	mg/Kg	J	Q
COBALT	8.89		0.0202	MDL	0.101	PQL	mg/Kg	J	Q
COPPER	25.5		0.0807	MDL	0.404	PQL	mg/Kg	J	Q
LEAD	27.8		0.0103	MDL	0.202	PQL	mg/Kg	J	E
NICKEL	26.8		0.101	MDL	0.404	PQL	mg/Kg	J	Q
SILVER	0.536		0.0143	MDL	0.101	PQL	mg/Kg	J	Q
THALLIUM	0.355		0.0303	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	46.9		0.0222	MDL	0.101	PQL	mg/Kg	J	E

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0575	MDL	0.397	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: PrepDE205_v2 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.815		0.0496	MDL	0.0991	PQL	mg/Kg	J	Q, E

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.106	J	0.0734	MDL	0.198	PQL	mg/Kg	J	Z, Q
ARSENIC	5.18		0.0793	MDL	0.397	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.679		0.0159	MDL	0.0991	PQL	mg/Kg	J	Q
CADMIUM	0.678		0.0436	MDL	0.0991	PQL	mg/Kg	J	Q
CHROMIUM	25.0		0.119	MDL	0.397	PQL	mg/Kg	J	Q
COBALT	7.56		0.0198	MDL	0.0991	PQL	mg/Kg	J	Q
COPPER	17.8		0.0793	MDL	0.397	PQL	mg/Kg	J	Q
LEAD	11.0		0.0101	MDL	0.198	PQL	mg/Kg	J	E
NICKEL	18.3		0.0991	MDL	0.397	PQL	mg/Kg	J	Q
SILVER	0.153		0.0141	MDL	0.0991	PQL	mg/Kg	J	Q
THALLIUM	0.313		0.0297	MDL	0.0991	PQL	mg/Kg	J	Q
VANADIUM	41.7		0.0218	MDL	0.0991	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.94	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, Q

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	2.0		0.20	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.83	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: PrepDE205_v2 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, Q

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

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0440	J	0.0068	MDL	0.0963	PQL	mg/Kg	J	Z

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0435	J	0.0067	MDL	0.0946	PQL	mg/Kg	J	Z

Method Category: SVOA **Method:** 6850 **Matrix:** SO

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	2.6	J	2.1	MDL	5.1	PQL	ug/Kg	J	Z

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

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.67	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.88	J	0.40	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: PrepDE205_v2 eQAPP Name: CDM_SSFL_110509

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

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

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.067	U	0.067	MDL	0.34	PQL	ug/Kg	R	Q
4,4'-DDE	1.2		0.067	MDL	0.34	PQL	ug/Kg	J	Q, *XIII
Chlordane	3.1	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z
DELTA-BHC	0.16	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z, *XIII
DIELDRIN	1.6	U	1.6	MDL	1.6	PQL	ug/Kg	R	Q
ENDOSULFAN SULFATE	0.17	U	0.17	MDL	0.34	PQL	ug/Kg	R	Q
ENDRIN	0.49	U	0.49	MDL	0.49	PQL	ug/Kg	R	Q
ENDRIN ALDEHYDE	0.77		0.067	MDL	0.34	PQL	ug/Kg	J	Q, C, *XIII
gamma-BHC (Lindane)	0.056	U	0.056	MDL	0.17	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.28		0.034	MDL	0.17	PQL	ug/Kg	J	*XIII
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	C

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	33	J	16	MDL	69	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	5.9	U	5.9	MDL	6.9	PQL	ug/Kg	UJ	C

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* DL2-BASE/NEUTRAL *Dilution:* 250

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	110		17	MDL	86	PQL	ug/Kg	J	*XIII
4,4'-DDT	170		17	MDL	86	PQL	ug/Kg	J	C

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.66		0.036	MDL	0.17	PQL	ug/Kg	J	S
gamma-BHC (Lindane)	0.52	U	0.52	MDL	0.52	PQL	ug/Kg	UJ	C, *XIII
HEPTACHLOR	0.34		0.061	MDL	0.17	PQL	ug/Kg	J	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: PrepDE205_v2 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *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'-DDE	9.8		0.67	MDL	3.4	PQL	ug/Kg	J	*XIII

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.25		0.036	MDL	0.17	PQL	ug/Kg	J	*XIII
ENDRIN ALDEHYDE	0.72		0.067	MDL	0.34	PQL	ug/Kg	J	C
gamma-BHC (Lindane)	0.23		0.034	MDL	0.17	PQL	ug/Kg	J	C
HEPTACHLOR	0.078	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z, *XIII
HEPTACHLOR EPOXIDE	0.37		0.034	MDL	0.17	PQL	ug/Kg	J	*XIII
METHOXYCHLOR	0.38	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, C, *XIII

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.35		0.067	MDL	0.34	PQL	ug/Kg	J	S, *XIII
4,4'-DDT	1.8	U	1.8	MDL	1.8	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.22	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z, S, *XIII
ENDRIN ALDEHYDE	0.39		0.067	MDL	0.34	PQL	ug/Kg	J	S, C, *XIII
gamma-BHC (Lindane)	0.37		0.034	MDL	0.17	PQL	ug/Kg	J	S, C, *XIII
METHOXYCHLOR	0.34	U	0.34	MDL	1.7	PQL	ug/Kg	UJ	C

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

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	42		1.7	MDL	8.6	PQL	ug/Kg	J	*XIII
Aroclor 5460	67		5.1	MDL	17	PQL	ug/Kg	J	C

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	45	J	20	MDL	86	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: PrepDE205_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	120	J	51	MDL	170	PQL	ug/Kg	J	Z, C

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	40		5.0	MDL	17	PQL	ug/Kg	J	C

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *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 1254	14	J	3.3	MDL	17	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.74		0.076	MDL	0.17	PQL	ug/Kg	J	Q
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	Q, L
MCPA	77	U	77	MDL	250	PQL	ug/Kg	R	Q

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *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	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.99	J	0.40	MDL	1.2	PQL	ug/Kg	J	Z, *IX
DINOSEB	0.81	U	0.81	MDL	2.4	PQL	ug/Kg	R	L
MCPP	2000		76	MDL	250	PQL	ug/Kg	J	*IX

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory:** LL

EDD Filename: PrepDE205_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	1.6		0.40	MDL	1.2	PQL	ug/Kg	J	*IX
DINOSEB	0.80	U	0.80	MDL	2.4	PQL	ug/Kg	R	L
MCPA	1800		76	MDL	250	PQL	ug/Kg	J	*IX
MCPP	1500		75	MDL	250	PQL	ug/Kg	J	*IX

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-211-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 10:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
1,2-DICHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
2,4-DINITROPHENOL	340	U	340	MDL	1000	PQL	ug/Kg	R	Q
4-CHLOROPHENYL-PHENYLETHER	34	U	34	MDL	170	PQL	ug/Kg	UJ	Q
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	R	Q
BENZO(A)PYRENE	19	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	44	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	C
FLUORANTHENE	81	J	17	MDL	170	PQL	ug/Kg	J	Z, Q, Q
HEXACHLOROBENZENE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
HEXACHLOROETHANE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
INDENO(1,2,3-CD)PYRENE	22	J	17	MDL	170	PQL	ug/Kg	J	Z
ISOPHORONE	17	U	17	MDL	170	PQL	ug/Kg	UJ	Q
PHENANTHRENE	62	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	76	J	17	MDL	170	PQL	ug/Kg	J	Z, Q

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	32	J	17	MDL	170	PQL	ug/Kg	J	Z
ANTHRACENE	78	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	130	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory:** LL

EDD Filename: PrepDE205_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-214-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:07:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	99	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	110	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	C
CARBAZOLE	100	J	17	MDL	170	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	30	J	17	MDL	170	PQL	ug/Kg	J	Z
DIBENZOFURAN	22	J	17	MDL	170	PQL	ug/Kg	J	Z
Di-n-octylphthalate	30	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORENE	33	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	98	J	17	MDL	170	PQL	ug/Kg	J	Z
PENTACHLOROPHENOL	410	J	170	MDL	510	PQL	ug/Kg	J	Z

Sample ID: SL-216-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	22	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	500	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	140	J	17	MDL	340	PQL	ug/Kg	J	Z
Di-n-butylphthalate	23	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z
PENTACHLOROPHENOL	190	J	170	MDL	500	PQL	ug/Kg	J	Z

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZOIC ACID	170	U	170	MDL	510	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	17	MDL	340	PQL	ug/Kg	J	Z
Di-n-butylphthalate	24	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: PrepDE205_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-211-SA6-SS-0.0-0.5** ***Collected:*** **7/21/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.89	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHENE	0.76	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.72	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	3.2		0.34	MDL	1.7	PQL	ug/Kg	J	Q
BENZO(A)ANTHRACENE	16		0.67	MDL	1.7	PQL	ug/Kg	J	Q
BENZO(K)FLUORANTHENE	15		0.67	MDL	1.7	PQL	ug/Kg	J	Q
CHRYSENE	40		0.34	MDL	1.7	PQL	ug/Kg	J	Q
DIBENZO(A,H)ANTHRACENE	1.8		0.67	MDL	1.7	PQL	ug/Kg	J	C
Di-n-butylphthalate	6.7	J	6.1	MDL	18	PQL	ug/Kg	J	Z
FLUORENE	0.83	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-214-SA6-SS-0.0-0.5** ***Collected:*** **7/21/2011 9:07:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	68	J	30	MDL	91	PQL	ug/Kg	J	Z

Sample ID: **SL-216-SA6-SS-0.0-0.5** ***Collected:*** **7/21/2011 9:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.83	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.2	J	6.1	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	2.4		0.67	MDL	1.7	PQL	ug/Kg	J	C
FLUORENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-219-SA6-SS-0.0-0.5** ***Collected:*** **7/21/2011 9:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.36	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.8		0.67	MDL	1.7	PQL	ug/Kg	J	C
FLUORENE	0.84	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.6		0.67	MDL	1.7	PQL	ug/Kg	J	C

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: PrepDE205_v2 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-219-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.99	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: PrepDE205_v2 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: PrepDE205_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: PrepDE205_v2 **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

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

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE205

Method Blank Outlier Report

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: DE205_v2. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20808CB221115	7/30/2011 11:15:00 AM	BORON	0.994 mg/Kg	SL-211-SA6-SS-0.0-0.5
		CALCIUM	11.0 mg/Kg	SL-214-SA6-SS-0.0-0.5
		IRON	4.84 mg/Kg	SL-216-SA6-SS-0.0-0.5
		MAGNESIUM	0.658 mg/Kg	SL-219-SA6-SS-0.0-0.5
		TIN	1.16 mg/Kg	
		Zirconium	0.676 mg/Kg	

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-211-SA6-SS-0.0-0.5(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-214-SA6-SS-0.0-0.5(RES)	TIN	3.31 mg/Kg	3.31U mg/Kg
SL-216-SA6-SS-0.0-0.5(RES)	TIN	3.31 mg/Kg	3.31U mg/Kg
SL-219-SA6-SS-0.0-0.5(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-219-SA6-SS-0.0-0.5(RES)	Zirconium	3.19 mg/Kg	3.19U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20826CB220348A	7/29/2011 3:48:00 AM	LEAD	0.0329 mg/Kg	SL-211-SA6-SS-0.0-0.5
		VANADIUM	0.0242 mg/Kg	SL-214-SA6-SS-0.0-0.5
				SL-216-SA6-SS-0.0-0.5
				SL-219-SA6-SS-0.0-0.5

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P13131AB240349A	8/4/2011 3:49:00 AM	2,4,5-T	0.082 ug/Kg	SL-211-SA6-SS-0.0-0.5
		MCPP	210 ug/Kg	SL-214-SA6-SS-0.0-0.5
				SL-216-SA6-SS-0.0-0.5
				SL-219-SA6-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: DE205_v2. 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-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	DINOSEB MCPA	0 0	7 -	10.00-46.00 10.00-213.00	200 (35.00) 200 (50.00)	DINOSEB MCPA	J (all detects) R (all non-detects)
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	2,4,5-TP (Silvex)	19	22	24.00-141.00	-	2,4,5-TP (Silvex)	J(all detects) UJ(all non-detects)

Method: 6850
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	PERCHLORATE	-	121	80.00-120.00	-	PERCHLORATE	J(all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	AROCLOR 1260	-95	-92	39.00-149.00	-	AROCLOR 1260	No Qual, Diluted Out

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	4,4'-DDT	-	207	10.00-176.00	-	4,4'-DDT	No Qual, >4x
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	4,4'-DDD DIELDRIN ENDOSULFAN SULFATE ENDRIN	169 0 0 0	0 0 0 -	16.00-163.00 19.00-154.00 21.00-160.00 11.00-149.00	200 (50.00) - - 200 (50.00)	4,4'-DDD DIELDRIN ENDOSULFAN SULFATE ENDRIN	J(all detects) R(all non-detects)
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	4,4'-DDE ENDRIN ALDEHYDE	8 5	- 3	18.00-161.00 10.00-148.00	- -	4,4'-DDE ENDRIN ALDEHYDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: DE205_v2. **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-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	ARSENIC	188	201	75.00-125.00	-	ARSENIC	
	BERYLLIUM	149	156	75.00-125.00	-	BERYLLIUM	
	CADMIUM	156	140	75.00-125.00	-	CADMIUM	J(all detects)
	CHROMIUM	186	180	75.00-125.00	-	CHROMIUM	
	COBALT	135	144	75.00-125.00	-	COBALT	
	COPPER	178	169	75.00-125.00	-	COPPER	
	NICKEL	201	190	75.00-125.00	-	NICKEL	
	SILVER	138	144	75.00-125.00	-	SILVER	V, Zn, No Qual, >4x
	THALLIUM	136	167	75.00-125.00	-	THALLIUM	
	VANADIUM	239	225	75.00-125.00	-	VANADIUM	
	ZINC	459	259	75.00-125.00	-	ZINC	
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	LEAD	371	27	75.00-125.00	22 (20.00)	LEAD	J(all detects) UJ(all non-detects) No Qual, %R, >4x
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	ANTIMONY	33	44	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	MOLYBDENUM	132	140	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	BARIUM	-114	-193	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	ALUMINUM	2588	2606	75.00-125.00	-	ALUMINUM	
	CALCIUM	241	223	75.00-125.00	-	CALCIUM	
	IRON	3265	3618	75.00-125.00	-	IRON	J(all detects)
	MAGNESIUM	472	473	75.00-125.00	-	MAGNESIUM	
	MANGANESE	253	205	75.00-125.00	-	MANGANESE	
	PHOSPHORUS	155	163	75.00-125.00	-	PHOSPHORUS	Al, Ca, Fe, Mg, Mn, P, Ti, No Qual, >4x
	POTASSIUM	189	187	75.00-125.00	-	POTASSIUM	
	TITANIUM	356	369	75.00-125.00	-	TITANIUM	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: DE205_v2. **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-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	ANTHRACENE	-	117	73.00-115.00	-	ANTHRACENE	J(all detects) Bis(2-Ethylhexyl)phthalate, No Qual, >4x
	BENZO(A)ANTHRACENE	129	182	59.00-128.00	-	BENZO(A)ANTHRACENE	
	BENZO(A)PYRENE	-	150	58.00-142.00	-	BENZO(A)PYRENE	
	BENZO(B)FLUORANTHENE	-	182	54.00-163.00	-	BENZO(B)FLUORANTHENE	
	BENZO(K)FLUORANTHENE	-	196	57.00-153.00	-	BENZO(K)FLUORANTHENE	
	BIS(2-ETHYLHEXYL)PHTHALAT	402	1115	39.00-167.00	61 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	
	CHRYSENE	148	234	67.00-123.00	-	CHRYSENE	
	FLUORANTHENE	238	404	51.00-149.00	32 (30.00)	FLUORANTHENE	
	PHENANTHRENE	172	268	62.00-122.00	32 (30.00)	PHENANTHRENE	
	PYRENE	243	430	51.00-131.00	36 (30.00)	PYRENE	

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-211-SA6-SS-0.0-0.5MS (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	FLUORIDE	40	-	80.00-120.00	-	FLUORIDE	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-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	4-CHLOROANILINE	-	-	13.00-107.00	62 (30.00)	4-CHLOROANILINE	J(all detects)
	ANILINE	-	-	18.00-116.00	50 (30.00)	ANILINE	
	BENZOIC ACID	-	-	10.00-173.00	36 (30.00)	BENZOIC ACID	
	BIS(2-ETHYLHEXYL)PHTHALAT	-	161	63.00-122.00	55 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	
	N-NITROSODIMETHYLAMINE	-	-	47.00-116.00	32 (30.00)	N-NITROSODIMETHYLAMINE	
	PYRENE	-	-	74.00-126.00	33 (30.00)	PYRENE	
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	2,4-DINITROPHENOL	0	0	20.00-143.00	-	2,4-DINITROPHENOL	J(all detects) R(all non-detects)
	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	
SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD (SL-211-SA6-SS-0.0-0.5)	1,2,4-TRICHLOROBENZENE	68	-	72.00-115.00	-	1,2,4-TRICHLOROBENZENE	J(all detects) UJ(all non-detects)
	1,2-DICHLOROBENZENE	65	-	66.00-108.00	-	1,2-DICHLOROBENZENE	
	2-METHYLNAPHTHALENE	70	-	76.00-114.00	-	2-METHYLNAPHTHALENE	
	4-CHLOROPHENYL-PHENYLET	71	-	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	FLUORANTHENE	72	-	73.00-112.00	37 (30.00)	FLUORANTHENE	
	HEXACHLOROBENZENE	74	-	77.00-114.00	-	HEXACHLOROBENZENE	
	HEXACHLOROETHANE	53	-	57.00-109.00	31 (30.00)	HEXACHLOROETHANE	
	ISOPHORONE	72	-	73.00-102.00	-	ISOPHORONE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: DE205_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-211-SA6-SS-0.0-0.5MS (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	HEXAVALENT CHROMIUM	49	-	75.00-125.00	-	HEXAVALENT CHROMIUM	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: DE205_v2. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-211-SA6-SS-0.0-0.5DUP (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	Zirconium	31	20.00	No Qual, OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-211-SA6-SS-0.0-0.5DUP (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	ARSENIC MOLYBDENUM VANADIUM	29 22 23	20.00 20.00 20.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-211-SA6-SS-0.0-0.5DUP (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	MERCURY	30	20.00	No Qual OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: DE205_v2. 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
P12131AQ240512A (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	DINOSEB	6	-	10.00-36.00	-	DINOSEB	J (all detects) R (all non-detects)

Method: 7471A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20411CQ220946 (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	MERCURY	121	-	85.00-120.00	-	MERCURY	No Qual, SRM within QC Limits

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20826CQ220351A (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	ANTIMONY	61	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20808CQ221119 (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	ALUMINUM TITANIUM	133 160	- -	80.00-120.00 80.00-120.00	- -	ALUMINUM TITANIUM	No Qual, SRM within QC Limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: DE205_v2. **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*
P4LKLCSQ262310 (SL-211-SA6-SS-0.0-0.5 SL -214-SA6-SS-0.0-0.5 SL -216-SA6-SS-0.0-0.5 SL -219-SA6-SS-0.0-0.5)	BIS(2-CHLOROISOPROPYL) ET	119	-	62.00-115.00	-	BIS(2-CHLOROISOPROPYL) E	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: DE205_v2. **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-214-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	694	20.00-120.00	All Target Analytes	J (all detects)
SL-219-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	160	20.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: DE205_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA6-SS-0.0-0.5	SODIUM	J	80.0	98.2	PQL	mg/Kg	J (all detects)
	TIN	J	2.95	9.82	PQL	mg/Kg	
	Zirconium	J	4.12	4.91	PQL	mg/Kg	
SL-214-SA6-SS-0.0-0.5	SODIUM	J	85.6	101	PQL	mg/Kg	J (all detects)
	TIN	J	3.31	10.1	PQL	mg/Kg	
	Zirconium	J	3.73	5.07	PQL	mg/Kg	
SL-216-SA6-SS-0.0-0.5	SODIUM	J	72.4	98.0	PQL	mg/Kg	J (all detects)
	TIN	J	3.31	9.80	PQL	mg/Kg	
	Zirconium	J	3.60	4.90	PQL	mg/Kg	
SL-219-SA6-SS-0.0-0.5	SODIUM	J	57.3	101	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	10.1	PQL	mg/Kg	
	Zirconium	J	3.19	5.06	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA6-SS-0.0-0.5	ANTIMONY	J	0.170	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.190	0.404	PQL	mg/Kg	
SL-214-SA6-SS-0.0-0.5	SELENIUM	J	0.173	0.397	PQL	mg/Kg	J (all detects)
SL-216-SA6-SS-0.0-0.5	ANTIMONY	J	0.178	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.175	0.404	PQL	mg/Kg	
SL-219-SA6-SS-0.0-0.5	ANTIMONY	J	0.106	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.166	0.397	PQL	mg/Kg	

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-219-SA6-SS-0.0-0.5	PERCHLORATE	J	2.6	5.1	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.94	1.0	PQL	mg/Kg	J (all detects)
SL-216-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.83	1.0	PQL	mg/Kg	J (all detects)
SL-219-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.51	1.0	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE205 Laboratory: LL

EDD Filename: DE205_v2. eQAPP Name: CDM_SSFL_110509

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA6-SS-0.0-0.5	MERCURY	J	0.0440	0.0963	PQL	mg/Kg	J (all detects)
SL-216-SA6-SS-0.0-0.5	MERCURY	J	0.0435	0.0946	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-216-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.67	1.2	PQL	mg/Kg	J (all detects)
SL-219-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.88	1.2	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA6-SS-0.0-0.5	Chlordane DELTA-BHC	J J	3.1 0.16	3.4 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-214-SA6-SS-0.0-0.5	Chlordane	J	33	69	PQL	ug/Kg	J (all detects)
SL-216-SA6-SS-0.0-0.5	HEPTACHLOR METHOXYCHLOR	J J	0.078 0.38	0.17 1.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-219-SA6-SS-0.0-0.5	ENDOSULFAN II	J	0.22	0.34	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-214-SA6-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	45 120	86 170	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-219-SA6-SS-0.0-0.5	AROCLOR 1254	J	14	17	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-216-SA6-SS-0.0-0.5	DICAMBA	J	0.99	1.2	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE205 **Laboratory: LL**

EDD Filename: DE205_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	19	170	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	44	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	20	170	PQL	ug/Kg	
	FLUORANTHENE	J	81	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	22	170	PQL	ug/Kg	
	PHENANTHRENE	J	62	170	PQL	ug/Kg	
	PYRENE	J	76	170	PQL	ug/Kg	
SL-214-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	32	170	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	78	170	PQL	ug/Kg	
	BENZO(A)PYRENE	J	130	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	99	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	110	170	PQL	ug/Kg	
	CARBAZOLE	J	100	170	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	30	170	PQL	ug/Kg	
	DIBENZOFURAN	J	22	170	PQL	ug/Kg	
	Di-n-octylphthalate	J	30	170	PQL	ug/Kg	
	FLUORENE	J	33	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	98	170	PQL	ug/Kg	
	PENTACHLOROPHENOL	J	410	510	PQL	ug/Kg	
SL-216-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	22	170	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	140	340	PQL	ug/Kg	
	Di-n-butylphthalate	J	23	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	17	170	PQL	ug/Kg	
	PENTACHLOROPHENOL	J	190	500	PQL	ug/Kg	
SL-219-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	20	170	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	340	PQL	ug/Kg	
	Di-n-butylphthalate	J	24	170	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-211-SA6-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.89	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.2	1.7	PQL	ug/Kg	
	ACENAPHTHENE	J	0.76	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.72	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.7	18	PQL	ug/Kg	
	FLUORENE	J	0.83	1.7	PQL	ug/Kg	
SL-214-SA6-SS-0.0-0.5	Butylbenzylphthalate	J	68	91	PQL	ug/Kg	J (all detects)
SL-216-SA6-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.83	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	18	PQL	ug/Kg	
	FLUORENE	J	1.3	1.7	PQL	ug/Kg	
SL-219-SA6-SS-0.0-0.5	ACENAPHTHENE	J	1.5	1.7	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.36	1.7	PQL	ug/Kg	
	FLUORENE	J	0.84	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.99	1.7	PQL	ug/Kg	

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 21, 2011

LDC Report Date: October 26, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-211-SA6-SS-0.0-0.5
SL-214-SA6-SS-0.0-0.5
SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5
SL-211-SA6-SS-0.0-0.5MS
SL-211-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Standard	Compound	%D	Associated Samples	Flag	A or P
8/8/11	ICV	Benzoic acid	65.0	All samples in SDG DE205	J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.
No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	1,2-Dichlorobenzene	65 (66-108)	-	-	J (all detects)	A
	Hexachloroethane	53 (57-109)	-	31 (≤30)	UJ (all non-detects)	
	Isophorone	72 (73-102)	-	-		
	1,2,4-Trichlorobenzene	68 (72-115)	-	-		
	4-Chlorophenyl-phenylether	71 (80-109)	-	-		
	Hexachlorobenzene	74 (77-114)	-	-		
	Fluoranthene	72 (73-112)	-	37 (≤30)		
SL-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	N-Nitrosodimethylamine	-	-	32 (≤30)	J (all detects)	A
	Aniline	-	-	50 (≤30)	J (all detects)	
	Benzoic acid	-	-	36 (≤30)	J (all detects)	
	4-Chloroaniline	-	-	62 (≤30)	J (all detects)	
	Pyrene			33 (≤30)	J (all detects)	
SL-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	2,4-Dinitrophenol	0 (20-143)	0 (20-143)	-	J (all detects)	A
				-	R (all non-detects)	
	Benzidine	0 (35-141)	0 (35-141)	-	J (all detects)	
					R (all non-detects	

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	LCS %R (Limits)	Associated Samples	Flag	A or P
214LKLCS	Bis(2-chloroisopropyl) ether	119 (62-115)	All samples in SDG DE205	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE205	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 DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Benzoic acid	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE205	SL-211-SA6-SS-0.0-0.5	1,2-Dichlorobenzene Isophorone 1,2,4-Trichlorobenzene 4-Chlorophenyl-phenylether Hexachlorobenzene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE205	SL-211-SA6-SS-0.0-0.5	Hexachloroethane Fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects	A	Matrix spike/Matrix spike duplicate (%R) (RPD) (Q)
DE205	SL-211-SA6-SS-0.0-0.5	N-Nitrosodimethylamine Aniline Benzoic acid 4-Chloroaniline Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE205	SL-211-SA6-SS-0.0-0.5	2,4-Dinitrophenol Benzidine	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Bis(2-chloroisopropyl) ether	J (all detects)	P	Laboratory control samples (%R) (L)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E2a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/21/11
SDG #: DE205 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
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: 7/21/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r²
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples: SO/L

1	SL-211-SA6-SS-0.0-0.5	11	SBLKLK214	21		31	
2	SL-214-SA6-SS-0.0-0.5	12		22		32	
3	SL-216-SA6-SS-0.0-0.5	13		23		33	
4	SL-219-SA6-SS-0.0-0.5	14		24		34	
5	SL-211-SA6-SS-0.0-0.5MS	15		25		35	
6	SL-211-SA6-SS-0.0-0.5MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26407E2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate %R				
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 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?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26407E2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation and CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26467E2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 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
	8/8/11	ICV	PPP	45		All	J/UJ/A (C)

LDC #: 26407E25

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

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
		5+6	all	following	pages	( )	#1	cont (Q) all
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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Lancaster Laboratories

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: DE205
Matrix: SOLID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 6352971 MS: 6352972 MSD: 6352973 Analyte	Batch: 11214SLK026 (Sample number(s): 6352971-6352973, 6352975-6352977) Spike Added ug/kg	Unspiked Conc ug/kg	MS Conc ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	%Rec Limits	%RPD	%RPD Limits	
N-Nitrosodimethylamine 000	1666.67	N.D.	1074.82	1484.53	64	89	47-116	32 *	30	J/Adet
Phenol	1666.67	N.D.	1242.92	1617.46	75	97	58-126	26	30	
Aniline	1666.67	N.D.	497.91	828.83	30	50	18-116	50 *	30	J/Adet
bis(2-Chloroethyl)ether	1666.67	N.D.	1193.55	1555.81	72	93	60-116	26	30	
2-Chlorophenol	1666.67	N.D.	1241.23	1603.23	74	96	73-121	25	30	
1,3-Dichlorobenzene	1666.67	N.D.	1067.9	1430.72	64	86	63-109	29	30	
1,4-Dichlorobenzene	1666.67	N.D.	1088.17	1460.61	65	88	58-108	29	30	
Benzyl alcohol	1666.67	N.D.	1163.26	1514.75	70	91	67-115	26	30	
1,2-Dichlorobenzene	1666.67	N.D.	1086.5	1476.61	65 *	89	66-108	30	30	J/W/A
2-Methylphenol	1666.67	N.D.	1242.24	1586.71	75	95	75-111	24	30	
bis(2-Chloroisopropyl)ether	1666.67	N.D.	1406.5	1877.52	84	113	55-142	29	30	
4-Methylphenol	1666.67	N.D.	1118.12	1436.92	67	86	59-123	25	30	
N-Nitroso-di-n-propylamine	1666.67	N.D.	1127.04	1471.14	68	88	60-116	26	30	
Hexachloroethane	1666.67	N.D.	887.12	1218.23	53 *	73	57-109	31 *	30	J/W/A
Nitrobenzene	1666.67	N.D.	1186.54	1584.4	71	95	57-125	29	30	
Isophorone	1666.67	N.D.	1206.75	1589.34	72 *	95	73-102	27	30	J/W/
2-Nitrophenol	1666.67	N.D.	1100.48	1485.57	66	89	56-127	30	30	
2,4-Dimethylphenol	1666.67	N.D.	1161.11	1474.86	70	88	68-118	24	30	
Benzoic acid	1666.67	N.D.	446.09	308.54	27	19	10-173	36 *	30	J/A
3,5-Dimethylphenol	1666.67	N.D.	1256.94	1582.41	75	95	71-127	23	30	
bis(2-Chloroethoxy)methane	1666.67	N.D.	1259.9	1636.38	76	98	75-104	26	30	
~~Tetralin~~	~~1666.67~~	~~N.D.~~	~~1414.96~~	~~828.05~~	~~85~~	~~50 *~~	~~70-130~~	~~53 *~~	~~30~~	~~J/W/I~~
2,4-Dichlorophenol	1666.67	N.D.	1206.17	1547.48	72	93	66-123	25	30	
1,2,4-Trichlorobenzene	1666.67	N.D.	1135.91	1496.79	68 *	90	72-115	27	30	J/W/A
Naphthalene	1666.67	N.D.	1191.68	1595.39	72	96	72-116	29	30	
4-Chloroaniline	1666.67	N.D.	434.66	828.89	26	50	13-107	62 *	30	J/A
Hexachlorobutadiene	1666.67	N.D.	1077.76	1425.86	65	86	62-120	28	30	
4-Chloro-3-methylphenol	1666.67	N.D.	1138.48	1437.59	68	86	62-122	23	30	
~~2-Methylnaphthalene~~ X	~~1666.67~~	~~N.D.~~	~~1173.21~~	~~1545.36~~	~~70 *~~ X	~~93~~	~~76-114~~	~~27~~	~~30~~	~~J/W/A~~
1-Methylnaphthalene	1666.67	N.D.	1144.49	1496.23	69	90	64-122	27	30	
Hexachlorocyclopentadiene	3333.33	N.D.	750.33	927.76	23	28	10-153	21	30	
2,4,6-Trichlorophenol	1666.67	N.D.	1270.43	1599.01	76	96	56-134	23	30	
2,4,5-Trichlorophenol	1666.67	N.D.	1276.83	1553.14	77	93	58-129	20	30	
2-Chloronaphthalene	1666.67	N.D.	1228.1	1507.32	74	90	50-141	20	30	
2-Nitroaniline	1666.67	N.D.	1398.41	1734.62	84	104	67-125	21	30	
Dimethylphthalate	1666.67	N.D.	1302.9	1608.29	78	96	64-118	21	30	
2,6-Dinitrotoluene	1666.67	N.D.	1247.77	1559.9	75	94	69-123	22	30	
Acenaphthylene	1666.67	N.D.	1387.54	1751.85	83	105	81-110	23	30	
3-Nitroaniline	1666.67	N.D.	1258.92	1601.42	76	96	59-122	24	30	
Acenaphthene	1666.67	N.D.	1294.74	1623.06	78	97	75-115	23	30	
2,4-Dinitrophenol	3333.33	N.D.	N.D.	N.D.	0 *	0 *	20-143	0	30	J/R/A
4-Nitrophenol	1666.67	N.D.	1027.99	1239.11	62	74	37-129	19	30	

Results are being reported on an as received basis.

Lancaster Laboratories

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: DE205
Matrix: SOLID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 6352971 MS: 6352972 MSD: 6352973 Analyte	Batch: 11214SLK026 (Sample number(s): 6352971-6352973, 6352975-6352977) Spike Added ug/kg	Unspiked Conc ug/kg	MS Conc ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	%Rec Limits	%RPD	%RPD Limits
2,4-Dinitrotoluene	1666.67	N.D.	1149.33	1429.08	69	86	56-129	22	30
Dibenzofuran	1666.67	N.D.	1214.	1514.87	73	91	71-112	22	30
Diethylphthalate	1666.67	N.D.	1280.83	1580.97	77	95	66-118	21	30
Fluorene	1666.67	N.D.	1263.26	1597.65	76	96	63-121	23	30
4-Chlorophenyl-phenylether	1666.67	N.D.	1182.02	1452.39	71 *	87	80-109	21	30
4-Nitroaniline	1666.67	N.D.	1077.21	1376.98	65	83	41-109	24	30
4,6-Dinitro-2-methylphenol	1666.67	N.D.	342.18	381.87	21	23	11-126	11	30
N-Nitrosodiphenylamine	1666.67	N.D.	1509.97	1791.23	91	107	71-122	17	30
1,2-Diphenylhydrazine	1666.67	N.D.	1539.23	1907.66	92	114	71-129	21	30
4-Bromophenyl-phenylether	1666.67	N.D.	1251.54	1537.93	75	92	67-129	21	30
Hexachlorobenzene	1666.67	N.D.	1225.55	1515.24	74 *	91	77-114	21	30
Pentachlorophenol	1666.67	N.D.	1117.73	1087.21	67	65	28-127	3	30
Phenanthrene	1666.67	60.99	1371.26	1762.87	79	102	65-125	25	30
Anthracene	1666.67	N.D.	1389.6	1714.93	83	103	75-115	21	30
Carbazole	1666.67	N.D.	1324.44	1620.77	79	97	64-120	20	30
Di-n-butylphthalate	1666.67	N.D.	1423.6	1727.86	85	104	67-123	19	30
Fluoranthene	1666.67	80.33	1273.83	1860.9	72 *	107	73-112	37 *	30
Benzidine	8333.33	N.D.	N.D.	N.D.	0 *	0 *	35-141	0	30
Pyrene	1666.67	74.97	1423.	1980.9	81	114	74-126	33 *	30
Butylbenzylphthalate	1666.67	N.D.	1472.92	1778.09	88	107	73-134	19	30
~~bis(2-Ethylhexyl)phthalate~~ X	~~1666.67~~	~~67.79~~	~~1563.46~~	~~2751.33~~	~~90~~	~~107~~ *	~~63-122~~	~~55~~ *	~~30~~
3,3'-Dichlorobenzidine	1666.67	N.D.	820.6	1010.25	49	61	28-109	21	30
Benzo(a)anthracene	1666.67	N.D.	1285.99	1561.43	77	94	65-122	19	30
Chrysene	1666.67	39.32	1258.6	1620.98	73	95	62-128	25	30
Di-n-octylphthalate	1666.67	N.D.	1616.83	1976.84	97	119	56-126	20	30
Benzo(b)fluoranthene	1666.67	43.99	1297.37	1723.53	75	101	59-125	28	30
Benzo(k)fluoranthene	1666.67	N.D.	1476.69	1732.8	89	104	56-132	16	30
Benzo(a)pyrene	1666.67	18.45	1352.65	1662.78	80	99	57-126	21	30
Indeno(1,2,3-cd)pyrene	1666.67	21.34	1396.63	1687.61	83	100	61-126	19	30
Dibenz(a,h)anthracene	1666.67	N.D.	1420.73	1707.76	85	102	65-125	18	30
Benzo(g,h,i)perylene	1666.67	20.18	1381.74	1674.68	82	99	59-127	19	30

DE205 8864

Results are being reported on an as received basis.

LDC #: 26407E2q

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		214LKLCS	~~BEE~~ MMM	119 (62-115)	( )	( )	All	J/Pdet (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC #: 26407E2a

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 (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	8/7/11	Phenol (1st internal standard)	2.140	2.140	2.088	2.088	4	4
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.387	0.387	0.394	0.394	2	2
			~~Fluorene~~ 3-Nitroaniline (3rd internal standard)	0.369	0.369	0.369	0.369	5	5
			~~Pentachlorophenol~~ Hexachlorobenzene (4th internal standard)	0.204	0.204	0.204	0.204	6	6
			~~Bis(2-ethylhexyl)phthalate~~ 3,3-Dichlorobenzidine (5th internal standard)	0.362	0.362	0.357	0.357	7	7
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.401	1.401	1.377	1.377	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 #: 26407E2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: A

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	8/14/11	Phenol (1st internal standard)	2.088	2.233	2.233	7	7
	21:03		~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.394	0.399	0.399	1	1
			~~Fluorene~~ 2-Nitroaniline (3rd internal standard)	0.369	0.414	0.414	12	12
			~~Pentachlorophenol~~ Hexachlorobenzene (4th internal standard)	0.204	0.180	0.180	12	12
			~~Bis(2-ethylhexyl)phthalate~~ 3,3-Dichlorobenzidine (5th internal standard)	0.357	0.348	0.348	3	3
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.377	1.613	1.613	17	17
2	ccv	8/15/11	~~Phenol (1st internal standard)~~		2.205	2.205	6	6
	13:04		Naphthalene (2nd internal standard)		0.391	0.391	1	1
			Fluorene (3rd internal standard)		0.398	0.398	8	8
			Pentachlorophenol (4th internal standard)		0.178	0.178	13	13
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.368	0.368	3	3
			~~Benzo(a)pyrene (6th internal standard)~~		1.528	1.528	11	11
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 #:_____

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	80.771	81	81	0
2-Fluorobiphenyl	↓	90.390	90	90	
Terphenyl-d14	↓	78.283	78	78	
Phenol-d5	200	183.182	92	92	
2-Fluorophenol	↓	181.80	91	91	
2,4,6-Tribromophenol	↓	131.155	66	66	↓
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 #: 26467E2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the 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: 5 + 6

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	1666.67	ND	1242.92	1617.46	75	75	97	97	26	26
N-Nitroso-di-n-propylamine	↓	↓	↓	1127.04	1471.14	68	68	88	88	26	26
4-Chloro-3-methylphenol	↓	↓	↓	1138.48	1437.59	68	68	86	86	23	23
Acenaphthene	↓	↓	↓	1294.74	1623.06	78	78	97	97	23	23
Pentachlorophenol	↓	↓	↓	1117.73	1087.21	67	67	65	65	3	3
Pyrene	↓	↓	74.97	1423	1980.9	81	81	114	114	33	33

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 #: 26407c2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 214LKLCS

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	1820.94	NA	109	109				
N-Nitroso-di-n-propylamine			1645.52		99	99				
4-Chloro-3-methylphenol			1590.7		95	95				
Acenaphthene			1631.73		98	98				
Pentachlorophenol			1258.73		76	76				
Pyrene			1719.2		103	103	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 #: 26407E2S

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. #1, 44:

Conc. = $\frac{(8789)(20)(1000)(\quad)(\quad)}{(87)(283)(1.103)(30)(0.99)(\quad)}$

= 62 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: July 21, 2011

LDC Report Date: October 26, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-211-SA6-SS-0.0-0.5
SL-214-SA6-SS-0.0-0.5
SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5
SL-211-SA6-SS-0.0-0.5MS
SL-211-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Standard	Compound	%D	Associated Samples	Flag	A or P
8/311	ICV	Indeno(1,2,3-cd)pyrene	29.0	SL-219-SA6-SS-0.0-0.5 SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD SBLKLK214	J (all detects) UJ (all non-detects)	A
8/311	ICV	Dibenzo(a,h)anthracene	28.0	SL-211-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5 SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD SBLKLK214	J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	Anthracene	-	117 (73-115)	-	J (all detects)	A
	Benzo(a)anthracene	129 (59-128)	182 (59-128)	-	J (all detects)	
	Chrysene	148 (67-123)	234 (67-123)	-	J (all detects)	
	Benzo(k)fluoranthene	-	196 (57-153)	-	J (all detects)	

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE205	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-219-SA6-SS-0.0-0.5	Indeno(1,2,3-cd)pyrene	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE205	SL-211-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Dibenzo(a,h)anthracene	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE205	SL-211-SA6-SS-0.0-0.5	Anthracene Benzo(a)anthracene Chrysene Benzo(k)fluoranthene	J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All TCL compounds	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E2b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/21/11

SDG #: DE205 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: EF

2nd Reviewer: A

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ SVOA (EPA SW 846 Method 8270C-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/21/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D ≤30
IV.	Continuing calibration/ICV	SW	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/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples:

SOIL

1	SL-211-SA6-SS-0.0-0.5	11	SBLKB213	21		31	
2	SL-214-SA6-SS-0.0-0.5	12		22		32	
3	SL-216-SA6-SS-0.0-0.5	13		23		33	
4	SL-219-SA6-SS-0.0-0.5	14		24		34	
5	SL-211-SA6-SS-0.0-0.5MS	15		25		35	
6	SL-211-SA6-SS-0.0-0.5MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26407E2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation and CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA 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 #: 26407E2h

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

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
	8/3/11	ICV	JJJ	29	→	SBLKLK214, 4, 5, 6	J/UJ/A (C)
			KKK	28	→	SBLKLK214, 1, 3→6	↓ ↓

LDC #: 26407E2b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A 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
		5+6	YY	( )	117 (73-115)	( )	#	J/A det (Q)
			EEE	402 (39-167)	1115 (39-167)	61 (30)		no qual parent 7 & X
			CCC	129 (59-128)	182 (59-128)	( )		J/A det (Q)
			DDD	148 (67-123)	234 (67-123)	( )		
			HHH	( )	196 (57-153)	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 26407E3D

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

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	8/3/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	0.998	0.998	1.044	1.044	5	5
			Fluorene (3rd internal standard)	1.212	1.212	1.284	1.284	6	6
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.038	1.038	1.091	1.091	6	6
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.076	1.076	1.139	1.139	5	5
			Benzo(a)pyrene (6th internal standard)	1.261	1.261	1.325	1.325	6	6
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 #: 26407E2b

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	140151	8/4/11	~~Phenol (1st internal standard)~~ →					
			Naphthalene (2nd internal standard)	1.044	0.994	0.994	5	5
			Fluorene (3rd internal standard)	1.284	1.224	1.224	5	5
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.091	1.063	1.063	2	2
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.139	1.090	1.090	4	4
			Benzo(a)pyrene (6th internal standard)	1.325	1.286	1.286	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 #: 26402205

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.999	100	100	0
2-Fluorobiphenyl	↓	0.926	93	93	↓
Terphenyl-d14	↓	1.196	120	120	↓
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 #: 26407E20

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: 516

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.33	33.3	0.75	32.78	34.58	96	96	101	101	5	5
Pentachlorophenol											
Pyrene	↓	↓	60.5	141.62	203.8	243	243	430	430	36	36

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 #: 26407E26

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: 213LBLCS

Compound	Spike Added (ug/Kg)		Spike Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	32.55	NA	98	98				
Pentachlorophenol										
Pyrene	33.33	NA	32.43	NA	97	97	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 #: 26407E2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1 , S :

Conc. = $\frac{(46059)(1)(1000)(\quad)(\quad)}{(861159)(1.044)(30)(0.99)(\quad)}$

= 1.72 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: July 21, 2011

LDC Report Date: October 24, 2011

Matrix: Soil

Parameters: Chlorinated Pesticides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-211-SA6-SS-0.0-0.5
SL-214-SA6-SS-0.0-0.5
SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5
SL-211-SA6-SS-0.0-0.5MS
SL-211-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses w ere 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.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of 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.

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

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
8/11/11	1P10223.76-CCV	RTX-CLP1	4,4'-DDT	20.7	SL-219-SA6-SS-0.0-0.5 SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD PBLK11214	J (all detects) UJ (all non-detects)	A
8/11/11	1P10223.76-CCV	RTX-CLP1	Methoxychlor	21.3	SL-211-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5 SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD PBLK11214	J (all detects) UJ (all non-detects)	A
8/18/11	IP10229.61-CCV	RTX-CLP1	4,4'-DDT	23.2	SL-214-SA6-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
8/18/11	IP10229.61-CCV	RTX-CLP2	4,4'-DDT	30.4	SL-214-SA6-SS-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
8/10/11	IP10223.11-ICV	RTX-CLPI	Endrin aldehyde	23.2	SL-211-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5 SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD PBLK11214	J (all detects) UJ (all non-detects)	A
8/10/11	IP10223.11-ICV	RTX-CLP2	Endrin aldehyde	21.9.	SL-211-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5 SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD PBLK11214	J (all detects) UJ (all non-detects)	A
8/10/11	IP10223.12-ICV	RTX-CLP1	gamma-BHC	69.1.	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5 SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD PBLK11214	J (all detects) UJ (all non-detects)	A
8/12/11	IP10224.11-ICV	RTX-CLP1	Endrin aldehyde	23.9	SL-214-SA6-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A
8/12/11	IP10224.11-ICV	RTX-CLP2	Endrin aldehyde	21.0	SL-214-SA6-SS-0.0-0.5	J (all detects) UJ (all non-detects)	A

Retention times (RT) of all compounds in the calibration standards were within QC limits.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-214-SA6-SS-0.0-0.5	Not specified	Decachlorobiphenyl	694 (20-120)	alpha-BHC beta-BHC delta-BHC gamma-BHC Heptachlor Aldrin	J (all detects)	A
SL-219-SA6-SS-0.0-0.5	Not specified	Decachlorobiphenyl	160 (20-120)	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 with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	4,4'-DDE Endrin aldehyde	8 (18-161) 5 (10-148)	- 3 (10-148)	- -	J (all detects) UJ (all non-detects)	A
SL-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	Dieldrin Endrin 4,4'-DDD Endosulfan Sulfate	0 (19-154) 0 (11-149) 169 (16-163) 0 (21-160)	0 (19-154) - 0 (16-163) 0 (21-160)	- 200 (≤50) 200 (≤50) -	J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-219-SA6-SS-0.0-0.5	gamma-BHC 4,4'-DDE Endosulfan II Endrin aldehyde	65.86 63.95 87.15 66.49	J (all detects) J (all detects) J (all detects) J (all detects)	A
SL-211-SA6-SS-0.0-0.5	delta-BHC Heptachlor epoxide 4,4'-DDE Endrin aldehyde	48.50 58.0 64.93 48.21	J (all detects) J (all detects) J (all detects) J (all detects)	A
SL-214-SA6-SS-0.0-0.5	gamma-BHC 4,4'-DDE	50.97 68.02	J (all detects) J (all detects)	A
SL-216-SA6-SS-0.0-0.5	delta-BHC Heptachlor Heptachlor epoxide Methoxychlor 4,4'-DDE	54.37 91.42 51.0 67.15 53.27	J (all detects) J (all detects) J (all detects) 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 DE205	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 DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-214-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	4,4'-DDT	J (all detects) UJ (all non-detects)	A	Continuing calibration (CCV %D) (C)
DE205	SL-211-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Methoxychlor	J (all detects) UJ (all non-detects)	A	Continuing calibration (CCV %D) (C)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Endrin aldehyde gamma-BHC	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE205	SL-214-SA6-SS-0.0-0.5	alpha-BHC beta-BHC delta-BHC gamma-BHC Heptachlor Aldrin	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Surrogate spikes (%R) (S)
DE205	SL-219-SA6-SS-0.0-0.5	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate spikes (%R) (S)
DE205	SL-211-SA6-SS-0.0-0.5	4,4'-DDE Endrin aldehyde	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE205	SL-211-SA6-SS-0.0-0.5	Dieldrin Endosulfan sulfate	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE205	SL-211-SA6-SS-0.0-0.5	Endrin 4,4'-DDD	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (RPD) (Q)
DE205	SL-219-SA6-SS-0.0-0.5	gamma-BHC 4,4'-DDE Endosulfan II Endrin aldehyde	J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE205	SL-211-SA6-SS-0.0-0.5	delta-BHC Heptachlor epoxide 4,4'-DDE Endrin aldehyde	J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE205	SL-214-SA6-SS-0.0-0.5	gamma-BHC 4,4'-DDE	J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-216-SA6-SS-0.0-0.5	delta-BHC Heptachlor Heptachlor epoxide Methoxychlor 4,4'-DDE	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E3a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/21/11
SDG #: DE205 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories 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: 7/21/11
II.	GC/ECD Instrument Performance Check	A	
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	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	N	

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

Validated Samples: SOIL

1	SL-211-SA6-SS-0.0-0.5	11	PBLK11214	21		31	
2	SL-214-SA6-SS-0.0-0.5	12		22		32	
3	SL-216-SA6-SS-0.0-0.5	13		23		33	
4	SL-219-SA6-SS-0.0-0.5	14		24		34	
5	SL-211-SA6-SS-0.0-0.5MS	15		25		35	
6	SL-211-SA6-SS-0.0-0.5MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26407E 3a
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FR
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) $\leq$ 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%~~ 20 or percent recoveries ~~85-115%~~ 80-120?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?			✓	
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	✓			
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	

LDC #: 26407E 3a
SDG #: all cores

VALIDATION FINDINGS CHECKLIST

Reviewer: M
2nd Reviewer: A

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 #: 26407E3a

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 ≤20.0%?
~~Level IV Only~~
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	8/10/11	IP10223.11-ICV	RTX clP1	R	23.2	( )	PBLK11214, 1, 3, 4,	J/UJ/A (C)
			RTX clP2	↓	21.9	( )	5, 6	↓
						( )		
						( )		
	8/10/11	IP10223.12-ICV	RTX clP1	D	69.1	( )	↓ + #2	↓
						( )		
						( )		
	8/12/11	IP10224.11-ICV	RTX clP1	R	23.9	( )	2	J/UJ/A (C)
			RTX clP2	↓	21.0	( )	↓	↓
						( )		
						( )		
	8/11/11	IP10223.76-CCV	RTX clP1	Θ	20.7	( )	PBLK11214, 4,	J/UJ/A (C)
						( )	5, 6	
						( )	↓	
	8/11/11	↓	↓	P	21.3	( )	↓ + 1, 3	J/UJ/A (C)
						( )		
						( )		
						( )		
	8/18/11	IP10229.61-CCV	RTX clP1	Θ	23.2	( )	2	J/UJ/A (C)
			RTX clP2	Θ	30.4	( )	↓	↓
						( )		
						( )		
						( )		
						( )		

LDC #: 26467E3q

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: I

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	NS	O	694 (20-120)	J/A det qua/ A,D,B,C,E & F only
				( )	
				( )	
	3 4	NS	O	160 (20-120)	J/P det qual All
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	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 #: 26467E 3a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ **GC** __ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	S + G	J	8 (18-161)	( )	( )	#1	J/UJ/A (Q)
		I	0 (19-154)	0 (19-154)	( )		J/R/A (Q)
		K	0 (11-149)	( )	200 (50)		
		M	169 (16-163)	0 (16-163)	200 (50)		
		O	( )	207 (10-176)	( )		no qual parent?
		R	5 (10-148)	3 (10-148)	( )		J/UJ/A (Q)
		N	0 (21-160)	0 (21-160)	( )		J/R/A (Q)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407E3Q
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD but 2 w/ Finding ≤ 40	Associated Samples	Qualifications
	D	65.86	4	J/A qlt * XIII
	J	63.95		
	L	87.15	↓	↓
	R	66.49		

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26407E3a
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
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
	C	48.50	#1	J/A det *XIII
	G	58.0	↓	↓
	J	64.93	↓	↓
	R	48.21	↓	↓
	E	50.97	2	J/A det
	chlordane (Technical)	68.02	↓	↓
	C	54.37	3	J/A det
	E	91.42	↓	↓
	G	51.0	↓	↓
	P	67.15	↓	↓
	J	53.27	↓	↓

Comments: See sample calculation verification worksheet for recalculations

COMQUANew.wpd

LDC #: 26407E3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: PVG
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (10/100 std)	Recalculated CF (10/100 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	IP10223	8/10/11	endosulfan I RTX-CLP	9.34×10^2	9.3×10^2	1.19×10^3	1.19×10^3	19.9	19.9
			methoxychlor ↓	3.66×10^2	3.66×10^2	4.57×10^2	4.57×10^2	11.6	11.6
			endosulfan I RTX-CLP	2.68×10^3	2.68×10^3	3.18×10^3	3.18×10^3	9.1	9.1
2			methoxychlor ↓	6.82×10^2	6.82×10^2	8.27×10^2	8.27×10^2	11.9	11.9
3	IP10224	8/12/11	↓	9.38×10^2	9.38×10^2	9.98×10^2	9.98×10^2	13.5	13.5
				3.85×10^2	3.85×10^2	3.75×10^2	3.75×10^2	5.8	5.8
				2.87×10^3	2.87×10^2	2.89×10^3	2.89×10^3	2.5	2.5
4			↓	7.17×10^2	7.17×10^2	6.95×10^2	6.95×10^2	5.5	5.5

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 recalculate results:

LDC #: 26407E3a
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: EJ
2nd Reviewer: C

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 20029 CF (std)	Recalculated 20029 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	IP10228	8/16/11	4,4-DDT RTX cuP1	5.53×10^2	5.53×10^2	5.44×10^2	5.44×10^2	8.0	8.0
			↓ cuP2	1.87×10^3	1.87×10^3	1.91×10^3	1.91×10^3	4.6	4.6
2	IP10229	8/17/11	↓	3.95×10^2	3.95×10^2	4.21×10^2	4.21×10^2	6.7	6.7
				1.61×10^3	1.61×10^3	1.64×10^3	1.64×10^3	3.6	3.6
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 #: 26467E3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer:
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	IP10223.76	8/11/11	endosulfan I / RTX clP1	10.0	8.22	8.22	17.8	17.8
			methoxychlor	100.0	78.72	78.72	21.3	21.3
			RTX clP2		8.40	8.40	16.0	16.0
2			↓	↓	84.38	84.38	15.7	15.7
	IP10224.5R	8/12/11	↓					
			↓	10.0	8.76	8.76	12.4	12.4
3			↓	100.0	95.23	95.23	4.8	4.8
			↓	10.0	9.15	9.15	8.5	8.5
				100.0	92.40	92.40	7.6	7.6
4	IP10229.6	8/18/11	4,4-DDT RTX clP1	20.02	15.37	15.37	23.2	23.2
			clP2	20.02	13.93	13.93	30.4	30.4

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.

SDG #: per cover

Surrogate Results Verification

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

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene	RTX CLP2	1.04	0.812276	78	78	0
Decachlorobiphenyl	RTX CLP1	↓	1.229885	118	118	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 #: 26407E39
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

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 us the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Concentration

RPD = I MS - MSD I * 2/(MS + MSD)

MS = Matrix spike percent recovery; MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 5 + 6

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	0.34	0.34	ND	0.38	0.33	112	112	97	97	14	14
4,4'-DDT	0.71	0.71	5.19	6.07	6.66	124	124	207	207	9	9

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.(of the recalculated results.

LDC #: 26407E3c
SDG #: all cond

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 6 of
Reviewer:
2nd Reviewer:

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for th 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: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma-BHC	0.34	NA	0.28	NA	82	82				
4,4'-DDT	0.71	↓	0.59	↓	83	83	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 #: 26407E3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

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 delta - B#C

$$\text{Conc.} = \frac{(6657)(10{,}000)(0.4)}{(2.78 \times 10^{7})(40)(0.99)(1000)}$$

=

0.16 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: July 21, 2011

LDC Report Date: October 26, 2011

Matrix: Soil

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-211-SA6-SS-0.0-0.5
SL-214-SA6-SS-0.0-0.5
SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5
SL-211-SA6-SS-0.0-0.5MS
SL-211-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
8/3/11	2P20214B.32R	ZBMultiR2	Aroclor-5460	26.6	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-211-SA6-SS-0.0-0.5MS SL-211-SA6-SS-0.0-0.5MSD PBLK09214	Aroclor-5460	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for SL-214-SA6-SS-0.0-0.5. Since the sample was diluted out, no data were qualified.

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 not within QC limits. Since the samples were diluted out, no data were qualified.

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. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
SL-211-SA6-SS-0.0-0.5	Aroclor-1254	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-216-SA6-SS-0.0-0.5	Aroclor-1260	54.60	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE205	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 DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5	Aroclor-5460	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE205	SL-211-SA6-SS-0.0-0.5	Aroclor-1254	J (all detects)	A	Compound quantitation and RLs (exceeded range) (*XIII)
DE205	SL-216-SA6-SS-0.0-0.5	Aroclor-1260	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E3b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/21/11

SDG #: DE205 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FT

2nd Reviewer:

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: 7/21/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	%D RSD ≤ 20
IV.	Continuing calibration/ICV	SW/A	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	N	

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

Validated Samples:

SOIL

1	SL-211-SA6-SS-0.0-0.5	11	PBLK092/4	21		31	
2	SL-214-SA6-SS-0.0-0.5	12		22		32	
3	SL-216-SA6-SS-0.0-0.5	13		23		33	
4	SL-219-SA6-SS-0.0-0.5	14		24		34	
5	SL-211-SA6-SS-0.0-0.5MS	15		25		35	
6	SL-211-SA6-SS-0.0-0.5MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26407E3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

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

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?				
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26407E3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓		✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 26407E3b

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?
X N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	8/3/11	2P20214B.32R	ZB multi R2	Aroclor 5460	26.4	( )	PBLK09214,	J/UJ/A (C)
	23:55					( )	1-3, 5, 6	5460 only
						( )		
						( )		
						( )		
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LDC #: 26407E3b

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	NS	O	129 (45-120)	no qual 50x 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 #: 26407E3b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	5 + 6	BB	%R (outside criteria)	( )	( )	#1	no qual 5# PL
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407E3b
SDG #: all covered

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: C

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding	Associated Samples	Qualifications
	AA	x'd cal Range	1	J/A det * XIII

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26407E3b
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

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 (% RPD ≤ 40 (% RPD Bet 2 column))	Associated Samples	Qualifications
	BB	54.60	3	J/Adct * XIII

Comments: See sample calculation verification worksheet for recalculations

COMQUANew.wpd

LDC #: 26407E3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: F7
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200std)	Recalculated CF (20std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL IP20214	8/2/11	Aroclor 1260-1 2B Multi R1	51	57	55	55	6.8	6.8
			↓ R2	266	266	280	280	5.7	5.7
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 #: 36407E3b
SDG #: fw cover

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	3P20214.31	8/3/11	Aroclor 1260 R1	200	171.23	171.23	14.4	14.4
	23:36		R2	↓	178.07	178.07	11.0	11.0
2	3P20214.05	8/5/11	↓	↓	200.07	200.07	0	0
	13:15				193.50	193.50	3.3	3.3
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 #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TCMX	ZB-R1	1.05	0.702116	68	67	1
PCB	ZB-R2	1.05	1.064543	102	102	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 #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer: [signature]

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 16

Compound	Spike Added (ug/kg)		Sample Conc (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB-1016	16.67	16.67	ND	15.38	16.69	92	92	100	100	8	8

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 #: 26407E3b
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS/D 09214

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	~~16.67~~	16.12	NA	97	97	NA			
		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 #: 26407E3b
SDG #: pel Coney

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 agree 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. #1 Compound Name Aroclor 1260

Concentration = 31.745 / (0.99)

= 32 ug/kg

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications
	1260-4 = (15894.078121)(2)(5) / (101)(60)		= 26.23	1260-4 =	26.23
				5 =	41.45
				6 =	27.52
					31.745

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 21, 2011

LDC Report Date: October 24, 2011

Matrix: Soil

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-211-SA6-SS-0.0-0.5
SL-214-SA6-SS-0.0-0.5
SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5
SL-211-SA6-SS-0.0-0.5MS
SL-211-SA6-SS-0.0-0.5MSD
SL-211-SA6-SS-0.0-0.5DUP

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 Methods 6010B, 6020, and 7471A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Boron Calcium Iron Lead Magnesium Tin Vanadium Zirconium	0.994 mg/Kg 10.980 mg/Kg 4.841 mg/Kg 0.033 mg/Kg 0.658 mg/Kg 1.164 mg/Kg 0.024 mg/Kg 0.676 mg/Kg	All samples in SDG DE205
ICB\CCB	Aluminum Beryllium Cobalt Lead Lithium Vanadium Zirconium	101 ug/L 0.072 ug/L 0.14 ug/L 0.056 ug/L 3.5 ug/L 0.14 ug/L 4.0 ug/L	All samples in SDG DE205

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-211-SA6-SS-0.0-0.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-214-SA6-SS-0.0-0.5	Tin Zirconium	3.3 mg/Kg 3.7 mg/Kg	3.3U mg/Kg 3.7U mg/Kg
SL-216-SA6-SS-0.0-0.5	Tin Zirconium	3.3 mg/Kg 3.6 mg/Kg	3.3U mg/Kg 3.6U mg/Kg
SL-219-SA6-SS-0.0-0.5	Tin Zirconium	2.8 mg/Kg 3.2 mg/Kg	2.8U mg/Kg 3.2U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-211-SA6-SS-0.0-0.5MS/MSD (All samples in SDG DE205)	Antimony	33 (75-125)	44 (75-125)	-	J (all detects) UJ (all non-detects)	A
	Lead	-	-	22 (≤20)	J (all detects) UJ (all non-detects)	
SL-211-SA6-SS-0.0-0.5MS/MSD (All samples in SDG DE205)	Arsenic	188 (75-125)	201 (75-125)	-	J (all detects)	A
	Beryllium	149 (75-125)	157 (75-125)	-	J (all detects)	
	Cadmium	156 (75-125)	140 (75-125)	-	J (all detects)	
	Chromium	186 (75-125)	180 (75-125)	-	J (all detects)	
	Cobalt	135 (75-125)	144 (75-125)	-	J (all detects)	
	Copper	178 (75-125)	169 (75-125)	-	J (all detects)	
	Molybdenum	132 (75-125)	140 (75-125)	-	J (all detects)	
	Nickel	201 (75-125)	190 (75-125)	-	J (all detects)	
	Potassium	189 (75-125)	187 (75-125)	-	J (all detects)	
	Silver	138 (75-125)	144 (75-125)	-	J (all detects)	
	Thallium	136 (75-125)	167 (75-125)	-	J (all detects)	

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-211-SA6-SS-0.0-0.5DUP (All samples in SDG DE205)	Arsenic Molybdenum Vanadium	29 (≤20) 22 (≤20) 23 (≤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) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE205	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 DE205

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Lead	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (RPD) (E)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Arsenic Beryllium Cadmium Chromium Cobalt Copper Molybdenum Nickel Potassium Silver Thallium	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)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Arsenic Molybdenum Vanadium	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-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
Metals - Laboratory Blank Data Qualification Summary - SDG DE205

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE205	SL-211-SA6-SS-0.0-0.5	Tin	3.0U mg/Kg	A	B
DE205	SL-214-SA6-SS-0.0-0.5	Tin Zirconium	3.3U mg/Kg 3.7U mg/Kg	A	B
DE205	SL-216-SA6-SS-0.0-0.5	Tin Zirconium	3.3U mg/Kg 3.6U mg/Kg	A	B
DE205	SL-219-SA6-SS-0.0-0.5	Tin Zirconium	2.8U mg/Kg 3.2U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-21-11

SDG #: DE205 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: CR

2nd Reviewer: MG

METHOD: Metals (EPA SW 846 Method 6010B/6020~~A~~/~~7000~~) 7471A

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/21/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	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	A	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

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

Validated Samples: Soil

1	SL-211-SA6-SS-0.0-0.5	11		21		31	
2	SL-214-SA6-SS-0.0-0.5	12		22		32	
3	SL-216-SA6-SS-0.0-0.5	13		23		33	
4	SL-219-SA6-SS-0.0-0.5	14		24		34	
5	SL-211-SA6-SS-0.0-0.5MS	15		25		35	
6	SL-211-SA6-SS-0.0-0.5MSD	16		26		36	
7	SL-211-SA6-SS-0.0-0.5DUP	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

.DC #: 260464

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: MG

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?	✓			

DC #: 264074

VALIDATION FINDINGS CHECKLIST

Reviewer: AR
2nd Reviewer: MG

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 #: 26407C4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: MG

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
LY		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
QCS-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

LDC #: 26407E4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: OR
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4						
Al			101	50.5										
B	0.994			4.97										
Be			0.072	0.07										
Ca	10.980			54.9										
Co			0.14	0.14										
Fe	4.841			24.21										
Pb	0.033		0.056	0.165										
Li			3.5	1.75										
Mg	0.658			3.29										
Sn	1.164			5.82	3.0	3.3	3.3	2.8						
V	0.024		0.14	0.14										
Zr	0.676		4.0	4		3.7	3.6	3.2						

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 #: 26407E4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: MG

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were ICP interference check samples performed as required?
(Y) N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	7/30/11	ICSA (11-01/12-11)	Mn	4	0.36	All	No Qual (>10x)

Comments:

LDC #: 26407E4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: CR
2nd Reviewer: MG

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
	5/6	S	Sb	33	44		All	J/UJ/A (Q)
			As	188	201			J det/A
			Be	149	157			
			Cd	156	140			
			Cr	186	180			
			Co	135	144			
			Cu	178	169			
			Pb			22		J/UJ/A (E)
			Mo	132	140			J det/A (Q)
			Ni	201	190			
			K	189	187			
			Ag	138	144			
			Tl	136	167			

Comments:

LDC #: 26407E4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: OZ
2nd Reviewer: MG

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
		7	S	As	29 (<20)		All	J/UJ (ACE)
				Mo	22		↓	↓
				V	23		↓	↓

Comments: _____

DUP.4SW

LDC #: 26607E4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: CS
2nd Reviewer: MG

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

An Initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found / True x 100 Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Ca	30183.6	30000	100.6	100.6	Y
ICV	ICP/MS (Initial calibration)	Be	51.97	50	103.9	103.9	
ICV	CVAA (Initial calibration)	Hg	2.36	2.5	94.4	94.4	
CCV	ICP (Continuing calibration)	K	23642.11	25000	94.6	94.6	
CCV	ICP/MS (Continuing calibration)	Ni	241.5	250	96.6	96.6	
CCV	CVAA (Continuing calibration)	Hg	0.99	1.0	99.0	99.0	
	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 #: 26407C4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
2nd Reviewer: MG

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	True / D / SDR (units) mg/kg	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Zn	101.4 ug/L	20 ug/L	97	97	Y
LCS	Laboratory control sample	Sr	73.8	73.2	101	101	↓
5	Matrix spike	Be	(SSR-SR) 1.1901	0.8009	149	149	↓
9	Duplicate	Mn	286.4735	322.7065	12	12	↓
1	ICP serial dilution	Ti	10483.22 ug/L	10943.60 ug/L	4	4	↓

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.

SDC #: 26401K4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CC
2nd reviewer: MG

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = (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:

$$\frac{100\,mL\,(157.60097\,mg/L)}{0.989\,(1.03g)} = 1547.1\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	15500	15500	Y
		Sb	0.17	0.17	
		As	5.0	5.0	
		Ba	145	145	
		Be	0.77	0.77	
		B	7.2	7.2	
		Cd	0.76	0.76	
		Ca	2590	2590	
		Cr	27.0	27.0	
		Co	7.2	7.2	
		Cu	19.1	19.1	
		Fe	19200	19200	
		Pb	40.2	40.2	
		Li	20.0	20.0	
		Mg	4230	4230	
		Mn	286	286	
		Hg	0.044	0.044	
		Mo	0.75	0.75	
		Ni	21.7	21.7	
		P	450	450	

Note:

LDC #: 26407K4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd reviewer: MG

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)
	1	K	3810	3810	Y
		Se	0.19	0.19	
		Ag	1.2	1.2	
		Na	80.0	80.0	
		Sr	23.0	23.0	
		Tl	0.40	0.40	
		Sn	3.0	3.0	
		Ti	1030	1030	
		V	42.4	42.4	
		Zn	121	121	
		Zr	4.1	4.1	

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 21, 2011

LDC Report Date: October 21, 2011

Matrix: Soil

Parameters: Herbicides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-211-SA6-SS-0.0-0.5
SL-214-SA6-SS-0.0-0.5
SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5
SL-211-SA6-SS-0.0-0.5MS
SL-211-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151A for Herbicides.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No herbicide contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
PBLK11213	8/1/11	MCPP 2,4,5-T	210 ug/Kg 0.082 ug/Kg	All samples in SDG DE205

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/(Matrix Spike) Duplicate

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-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	MCPA	0 (10-213)	-	200 (≤50)	J (all detects) R (all non-detects)	A
	Dinoseb	0 (10-46)	7 (10-46)	200 (≤50)	J (all detects) R (all non-detects)	
SL-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	2,4,5-TP	19 (24-141)	22 (24-141)	-	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS11213	Dinoseb	6 (10-36)	All samples in SDG DE205	J (all detects) R (all non-detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-216-SA6-SS-0.0-0.5	Dicamba MCPP	62.62 139.60	J (all detects) J (all detects)	A
SL-219-SA6-SS-0.0-0.5	Dicamba MCPP MCPA	48.19 42.46 67.32	J (all detects) 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 DE205	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 DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-211-SA6-SS-0.0-0.5	MCPA Dinoseb	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE205	SL-211-SA6-SS-0.0-0.5	2,4,5-TP	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Dinoseb	J (all detects) R (all non-detects)	P	Laboratory control samples (%R) (L)
DE205	SL-216-SA6-SS-0.0-0.5	Dicamba MCPP	J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE205	SL-219-SA6-SS-0.0-0.5	Dicamba MCPP MCPA	J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Herbicides - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Herbicides - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E5 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/19/11
SDG #: DE205 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 7/21/11
II	Initial calibration	A	% RSD ≤ 20, r2
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	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-211-SA6-SS-0.0-0.5	11	PBLK11213	21		31	
2	SL-214-SA6-SS-0.0-0.5	12		22		32	
3	SL-216-SA6-SS-0.0-0.5	13		23		33	
4	SL-219-SA6-SS-0.0-0.5	14		24		34	
5	SL-211-SA6-SS-0.0-0.5MS	15		25		35	
6	SL-211-SA6-SS-0.0-0.5MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

DC #: 26407E5
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 #: 26407E5
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.			✓	

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 #: 26407E5

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: EJ
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 8/01/11 **Blank analysis date:** 8/4/11 **Associated samples:** All (ND + 75X)
Conc. units: ug/Kg

Compound	Blank ID	Sample Identification						
	PBLK11213	5X						
I	210	1050						
C	0.082	0.41						

Blank extraction date: _____ **Blank analysis date:** _____ **Associated samples:** _____
Conc. units: _____

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26407E5

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	5+6	J	0 (10-213)	( )	200 (50)	All	J/R/A Q
		D	19 (24-141)	22 (24-141)	( )	↓	J/UJ/A ↓
		E	0 (10-46)	7 (10-46)	200 ( )	↓	J/R/A ↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407E5

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

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 11213	E	6 (10-36	( )	( )	All	J/R/P (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26407E5
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	%RPD Bet 2 col Finding ±40	Associated Samples	Qualifications
	~~G~~ G	62.62	3	J/Adet *IX
	I	139.60	↓	↓
	G	48.19	4	
	I	42.46		
	J	67.32		↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26407E5
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

3

#	Standard ID	Calibration Date	Compound	Reported CF (410.4/110.7 std)	Recalculated CF (→ std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL 1H1521A	8/2/11	Dalapon ZB XLB	1.65×10^{-1}	1.65×10^{-1}	1.61×10^{-1}	1.61×10^{-1}	10.6	10.6
			Dinoseb ~~ZB35~~ ↓	3.82×10^{-1}	3.82×10^{-1}	4.26×10^{-1}	4.26×10^{-1}	17.0	17.0
2	ICAL 1H1521AB	8/2/11	↓ ZB35 ↓	1.55×10^{-1}	1.55×10^{-1}	1.51×10^{-1}	1.51×10^{-1}	10.6	10.6
				3.70×10^{-1}	3.70×10^{-1}	4.13×10^{-1}	4.13×10^{-1}	16.2	16.2
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 #: 26407E5
SDG #: fw Cover

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 22:45	8/3/11	Dalapon ZB-XLB	410.40	442.75	442.75	442.75	7.9
			Dinoseb	100.70	85-37	85-37	85.37	15.2
			ZB-35	↓	437.60	437.60	6.6	6.6
2			↓	↓	88.05	88.05	12.6	12.6
	CCV 4:17	8/4/11	ZB ~~-XLB~~ 35	↓	433.78	433.78	5.7	5.7
			↓	↓	89.16	89.16	11.5	11.5
3			ZB-XLB	↓	441.28	441.28	7.5	7.5
			↓	↓	85.40	85.40	15.2	15.2
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #:_____

SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1

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
1				Reported	Recalculated	
2,4-DCAA	ZB-XLB	6.66	5.57754	84	84	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 #:_____

SDG #: pu cover

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: 5 + 6

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)	8.29	8.29	ND	5.91	6.25	71	71	75	75	6	6
Dinoseb (8151)	14.11	14.11	ND	0	1.02	0	0	7	7	200	200
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 #: 26407E5
SDG #: [illegible]

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 11213

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	7.67	NA	92	92				
Dinoseb (8151)	14.18	↓	0.86	↓	6	6	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 #: 26407E5
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. #1 Compound Name 2,4,5-TP

Concentration = $\frac{5787 \quad (100)(2)}{(37350)(0.7087)(60)(0.99)}$

$= 0.74$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: [illegible]

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 21, 2011

LDC Report Date: October 24, 2011

Matrix: Soil

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-211-SA6-SS-0.0-0.5
SL-214-SA6-SS-0.0-0.5
SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5
SL-211-SA6-SS-0.0-0.5MS
SL-211-SA6-SS-0.0-0.5DUP

Introduction

This data review covers 6 soil 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, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

No field blanks were identified in this SDG.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-211-SA6-SS-0.0-0.5MS (All samples in SDG DE205)	Fluoride	40 (80-120)	J (all detects) UJ (all non-detects)	A
	Hexavalent chromium	49 (75-125)	J (all detects) UJ (all non-detects)	

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 DE205	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 DE205

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	Fluoride Hexavalent chromium	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE205	SL-211-SA6-SS-0.0-0.5 SL-214-SA6-SS-0.0-0.5 SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-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 DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E6 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-21-11

SDG #: DE205 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: AL

2nd Reviewer: MG

METHOD: (Analyte) Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), Perchlorate (EPA Method 314.0)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/21/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

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

Validated Samples: Soil

1	SL-211-SA6-SS-0.0-0.5	11		21		31	
2	SL-214-SA6-SS-0.0-0.5	12		22		32	
3	SL-216-SA6-SS-0.0-0.5	13		23		33	
4	SL-219-SA6-SS-0.0-0.5	14		24		34	
5	SL-211-SA6-SS-0.0-0.5MS	15		25		35	
6	SL-211-SA6-SS-0.0-0.5DUP	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Reviewer: CF
2nd Reviewer: MG

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.			✓	

SDC #: 2640766

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Page: ___ of ___
Reviewer: CC
2nd reviewer: MG

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-4		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 5,6		pH TDS Cl (F) NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC (CR^{6+}) (ClO_4)
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4

Comments:

LDC #: 26467G6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Reviewer: CR
2nd Reviewer: MG

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
		5	S	F	40 (80-120)	All	J/UJ/A (Q)
				Q.O.+	49 (75-125)	↓	↓

Comments:

LDC #: 26407E6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR
2nd Reviewer: MG

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of ClO4 was recalculated. Calibration date: 7/11/11

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. (mg/L)	Area	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.002	*1.000*	1.000	Y
		s2	4	0.008			
		s3	10	0.027			
		s4	25	0.07			
		s5	100	0.302			
Calibration verification	F	CCV	1.5	1.583	105	105	
Calibration verification	ClO4	CCV	100	102.7819	103	103	
Calibration verification	Cr6+	CCV	200	204.8768	102	102	

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 #: 54076E0

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: MG

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

%R = Found / True x 100 Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

RPD = |S-D| / (S+D)/2 x 100 Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units) mg/kg	True / D (units) mg/kg	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	F	9.9	10	99	-	Y
5	Matrix spike sample	ClO4	(SSR-SR) 514	493	104	104	↓
6	Duplicate sample	ClO4	0.93	0.78	18	18	↓

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 #: 26461E6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: MG

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 =

$y = 0.1962x - 0.0037$

Recalculation:

$$\frac{(0.026+0.0037)(50\,mL)}{0.9354(5.04g)(0.1962)} = 1.6\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	F	1.5	1.6	Y
		Got	0.94	0.95	J

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	July 21, 2011
LDC Report Date:	October 21, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE205

Sample Identification

SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

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 RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE205	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 DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E8 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/19/11
SDG #: DE205 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer:

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/21/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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-216-SA6-SS-0.0-0.5	11	PBLK022208	21		31	
2	SL-219-SA6-SS-0.0-0.5	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26407E8
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 #: 26407E8
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 #: 26407E5
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 (288 std)	Recalculated CF (288 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/12/11	C8 - C40	18866.	18866	19634	19634	5.6	5.6
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 #: 26407E3
SDG #: pw cover

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 2:59	7/28/11	C8 – C40	575.96	657.14	657.14	14.1	14.1
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [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	
chlorobenzene	NS	1.0	0.829	83	83	0
orthoterphenyl	↓	1.0	1.063	106	106	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 #: 26407CS
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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 (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C8-C11)	0.84	NA	0.69	NA	82	82	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407E8
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 $C_{30} - C_{40}$ (EFH)

Concentration = $\frac{44652610\ (1000)}{19634\ (60)\ (0.91)\ (0.991)\ (1000)}$

$= 38\ mg/kg$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: [illegible]

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 21, 2011

LDC Report Date: October 21, 2011

Matrix: Soil

Parameters: Terphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

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 RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE205	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 DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E41 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/19/11
SDG #: DE205 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/21/11
II	Initial calibration	A	% RSD ≤20
III.	Calibration verification/ICV	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	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-216-SA6-SS-0.0-0.5	11	PBLK 32214	21		31	
2	SL-219-SA6-SS-0.0-0.5	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26407E41
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FM
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 #: 26407E4
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 #: 26407E41
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 (std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/28/11	o-Terphenyl SPB-5	17.71 (2.07X10^4)	17.74 (2.07X10^4) ✓	1.99X10^4 ✓	1.99X10^4	2.5	2.5
2	ICAL	7/28/11	✓						
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 #: 26407E41
SDG #: fw 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 9:27	8/4/11	o-Terphenyl	17.74	18.33	18.33	3.3	3.3
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 #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Triacontane-d62	NS	0.333	0.25 4265	76	76	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 #: 26407E11
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: FJ
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 (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-Terpheny/	1.65	NA	1.41	NA	85	85	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407E4/
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 = _____

NP

#	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: July 21, 2011

LDC Report Date: October 21, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

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 RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE205	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 DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E43 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/19/11

SDG #: DE205 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: B

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: 7/21/11
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/ICV	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified LCS
VII.	Laboratory control samples	A	
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	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-216-SA6-SS-0.0-0.5	11	PBLK 24209	21		31	
2	SL-219-SA6-SS-0.0-0.5	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 26407E43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FM
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 #: 26407543
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓		✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26407E43
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
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

3 @ 1:28

#	Standard ID	Calibration Date	Compound	Reported CF (5000_{std})	Recalculated CF (5000_{std})	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/28/11	Methanol	3.25×10^{-1}	3.25×10^{-1}	3.46×10^{-1}	3.46×10^{-1}	14.0	14.0
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407E43
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	dev 17:24	7/28/11	methanol	5000.00	4768.12	4768.12	4.6	4.6
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: _____

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	
Acetone	N7	2500	2613.374	105	105	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 #: 26407E43
SDG #: µ cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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)										
Methanol	2500	NA	2/22.72	NA	81	81	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 #: 26407E43
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: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: July 21, 2011

LDC Report Date: October 21, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE205

Sample Identification

SL-216-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

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 RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE205	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 DE205

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE205	SL-216-SA6-SS-0.0-0.5 SL-219-SA6-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE205

No Sample Data Qualified in this SDG

LDC #: 26407E45 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/19/11

SDG #: DE205 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FR

2nd Reviewer:

METHOD: GC Glycols (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/21/11
II	Initial calibration	A	%RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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-216-SA6-SS-0.0-0.5	11	PBLK01204	21		31	
2	SL-219-SA6-SS-0.0-0.5	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

.DC #: 26407E45
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FI
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 #: 26407E45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
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 #: 26407E45
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 210.7188 CF (std)	Recalculated 210.7188 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	7/13/11	Propylene Glycol	7.60×10^2	7.60×10^2	7.67×10^2	7.67×10^2	2.4	2.4
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407E45
SDG #: fw comm

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 7:57	7/23/11	Propylene glycol	105.36	106.13	106.13	0.7	0.7
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	NS	192.545	178.6819	93	93	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 #: 26407E41
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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: LCS01204

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	192.77	NA	164.51	NA	85	85	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407E45
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:	July 21, 2011
LDC Report Date:	October 21, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE205

Sample Identification

SL-211-SA6-SS-0.0-0.5
SL-219-SA6-SS-0.0-0.5
SL-211-SA6-SS-0.0-0.5MS
SL-211-SA6-SS-0.0-0.5MSD

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

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-211-SA6-SS-0.0-0.5MS/MSD (SL-211-SA6-SS-0.0-0.5)	Perchlorate	-	121 (80-120)	-	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.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE205	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.

LDC #: 26407E87 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/19/11

SDG #: DE205 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 7/21/11
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	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

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

Validated Samples: SOIL

1	SL-211-SA6-SS-0.0-0.5	11	PBLK22213	21		31	
2	SL-219-SA6-SS-0.0-0.5	12		22		32	
3	SL-211-SA6-SS-0.0-0.5MS	13		23		33	
4	SL-211-SA6-SS-0.0-0.5MSD	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 #: 26407E87

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ~~≤ 25%~~ 15/20 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/ Matrix spike 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?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.				
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26407E87

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

METHOD: ~~GC/MS BNA (EPA SW-846 Method 8270)~~ 6850

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
		3 + 4	Perchlorate	( )	121 (80-120	( )	#1	J / A det Q
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC # 26407E87
SDG# see comp

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

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

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
08/08/2011	LCMS	perchlorate	0.035076	0.040	
			0.078526	0.100	
			0.168897	0.200	
			0.348140	0.400	
			0.903796	1.000	
			2.494629	2.500	

Regression Output:		Regression Output:	Reported	
Constant		-0.03676		
Std Err of Y Est		0.03869		
R Squared		0.99867		0.99673
No. of Observations		6.00000		
Degrees of Freedom		4.00000		
X Coefficient(s)	1.002E+000	0.12		
Std Err of Coef.	0.018309	0.02		

LDC #: 26407E87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270C)~~ 6840

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	conc. ~~Average RRF~~ (initial)	Reported conc. RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	MS5P2151102/	8/8/11	~~Phenol (1st internal standard)~~ Perchlorate	0.4	0.452	0.452	13	13
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407E81

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 6850

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: 3 + 4

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	119	121	119	119	121	121	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26407E87

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 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 = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 22213

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	114	NA	114	114	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 #: 26407E87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_t	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #2 , perchlorate

Conc. = ( )( )( )( )( ) / ( )( )( )( )( )

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification
		$\frac{1192}{89460} - (0.0967)\left(\frac{X}{10}\right) = 0.0119$			
		$X = 2.6$ ug/kg			

SAMPLE DELIVERY GROUP

DE206

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-Jul-2011	TB-072111	6353043	TB	5030B	8015M	III
21-Jul-2011	TB-072111	6353043	TB	5030B	8260B	III
21-Jul-2011	TB-072111	6353043	TB	5030B	8260B SIM	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	3050B	6010B	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	3050B	6020	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	3550B	8015B	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	3550B	8015M	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	3550B	8082	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	3550B	8270C	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	3550B	8270C SIM	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	5035	8015M	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	5035	8260B	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	5035	8260B SIM	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	Gen Prep	7199	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	METHOD	300.0	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	METHOD	314.0	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	METHOD	6850	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	METHOD	7471A	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	METHOD	8015B	III
21-Jul-2011	SL-073-SA6-SB-4.0-5.0	6353038	N	METHOD	8015M	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	3050B	6010B	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	3050B	6020	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	3550B	8081A	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	3550B	8082	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	3550B	8151A	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	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
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	3550B	8270C SIM	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	Gen Prep	7199	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	METHOD	300.0	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	METHOD	314.0	III
21-Jul-2011	DUP05-SA6-QC-072111	6353037	FD	METHOD	7471A	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	3050B	6010B	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	3050B	6020	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	3550B	8015B	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	3550B	8015M	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	3550B	8082	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	3550B	8270C	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	3550B	8270C SIM	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	5035	8015M	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	5035	8260B	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	5035	8260B SIM	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	Gen Prep	7199	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	METHOD	300.0	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	METHOD	314.0	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	METHOD	6850	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	METHOD	7471A	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	METHOD	8015B	III
21-Jul-2011	SL-105-SA6-SB-2.5-3.5	6353042	N	METHOD	8015M	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3050B	6010B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3050B	6020	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3546	1625C	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3550B	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3550B	8015M	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3550B	8081A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3550B	8082	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3550B	8151A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3550B	8270C	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	3550B	8270C SIM	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	8330	8330A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	Gen Prep	7199	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	METHOD	300.0	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	METHOD	314.0	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	METHOD	7471A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	METHOD	8015B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	METHOD	8015M	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	METHOD	8315A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5	6353026	N	METHOD	9012B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3050B	6010B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3050B	6020	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3546	1625C	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3550B	8015B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3550B	8015M	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3550B	8081A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3550B	8082	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3550B	8151A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3550B	8270C	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	3550B	8270C SIM	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	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
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	Gen Prep	7199	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	METHOD	300.0	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	METHOD	314.0	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	METHOD	7471A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	METHOD	8015B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	METHOD	8015M	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	METHOD	8315A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MS	6353027	MS	METHOD	9012B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3050B	6010B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3050B	6020	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3546	1625C	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3550B	8015B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3550B	8015M	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3550B	8081A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3550B	8082	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3550B	8151A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3550B	8270C	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	3550B	8270C SIM	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	8330	8330A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	METHOD	7471A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	METHOD	8015B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	METHOD	8015M	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5MSD	6353028	MSD	METHOD	8315A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	3050B	6010B	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	3050B	6020	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	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-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	3550B	8151A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	Gen Prep	7199	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	METHOD	300.0	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	METHOD	314.0	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	METHOD	7471A	III
21-Jul-2011	SL-228-SA6-SS-0.0-0.5DUP	6353029	DUP	METHOD	9012B	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3050B	6010B	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3050B	6020	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3546	1625C	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3550B	8015B	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3550B	8015M	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3550B	8081A	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3550B	8082	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3550B	8151A	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3550B	8270C	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	3550B	8270C SIM	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	8330	8330A	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	Gen Prep	7199	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	METHOD	300.0	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	METHOD	314.0	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	METHOD	7471A	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	METHOD	8015B	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	METHOD	8015M	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	METHOD	8315A	III
21-Jul-2011	DUP06-SA6-QC-072111	6353036	FD	METHOD	9012B	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	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
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	3050B	6020	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	3550B	8081A	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	3550B	8082	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	3550B	8151A	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	3550B	8270C	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	3550B	8270C SIM	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	Gen Prep	7199	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	METHOD	300.0	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	METHOD	314.0	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	METHOD	6850	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5	6353032	N	METHOD	7471A	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5MSD	P353032M241319A	MSD	METHOD	6850	III
21-Jul-2011	SL-314-SA6-SS-0.0-0.5MS	P353032R241313A	MS	METHOD	6850	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3050B	6010B	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3050B	6020	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3546	1625C	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3550B	8015B	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3550B	8015M	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3550B	8081A	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3550B	8082	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3550B	8151A	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3550B	8270C	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	3550B	8270C SIM	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	8330	8330A	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	Gen Prep	7199	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	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
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	METHOD	314.0	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	METHOD	7471A	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	METHOD	8015B	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	METHOD	8015M	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	METHOD	8315A	III
21-Jul-2011	SL-315-SA6-SS-0.0-0.5	6353033	N	METHOD	9012B	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	3050B	6010B	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	3050B	6020	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	3550B	8081A	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	3550B	8082	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	3550B	8151A	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	3550B	8270C	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	3550B	8270C SIM	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	Gen Prep	7199	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	METHOD	300.0	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	METHOD	314.0	III
21-Jul-2011	SL-237-SA6-SS-0.0-0.5	6353030	N	METHOD	7471A	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	3050B	6010B	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	3050B	6020	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	3550B	8081A	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	3550B	8082	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	3550B	8151A	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	3550B	8270C	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	3550B	8270C SIM	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	Gen Prep	7199	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	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
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	METHOD	314.0	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	METHOD	6850	III
21-Jul-2011	SL-316-SA6-SS-0.0-0.5	6353034	N	METHOD	7471A	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	3050B	6010B	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	3050B	6020	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	3550B	8015B	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	3550B	8015M	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	3550B	8082	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	3550B	8270C	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	3550B	8270C SIM	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	5035	8015M	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	5035	8260B	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	5035	8260B SIM	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	Gen Prep	7199	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	METHOD	300.0	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	METHOD	314.0	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	METHOD	6850	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	METHOD	7471A	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	METHOD	8015B	III
21-Jul-2011	SL-104-SA6-SB-2.5-3.5	6353041	N	METHOD	8015M	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	3050B	6010B	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	3050B	6020	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	3550B	8081A	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	3550B	8082	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	3550B	8151A	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	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
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	3550B	8270C SIM	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	Gen Prep	7199	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	METHOD	300.0	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	METHOD	314.0	III
21-Jul-2011	SL-318-SA6-SS-0.0-0.5	6353035	N	METHOD	7471A	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3050B	6010B	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3050B	6020	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3546	1625C	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3550B	8015B	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3550B	8015M	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3550B	8081A	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3550B	8082	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3550B	8151A	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3550B	8270C	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	3550B	8270C SIM	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	8330	8330A	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	Gen Prep	7199	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	METHOD	300.0	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	METHOD	314.0	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	METHOD	7471A	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	METHOD	8015B	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	METHOD	8015M	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	METHOD	8315A	III
21-Jul-2011	SL-240-SA6-SS-0.0-0.5	6353031	N	METHOD	9012B	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	3050B	6010B	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	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-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	3550B	8015B	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	3550B	8015M	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	3550B	8082	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	3550B	8270C	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	3550B	8270C SIM	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	5035	8015M	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	5035	8260B	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	5035	8260B SIM	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	Gen Prep	7199	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	METHOD	300.0	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	METHOD	314.0	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	METHOD	6850	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	METHOD	7471A	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	METHOD	8015B	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0	6353039	N	METHOD	8015M	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0DUP	P353039D272254B	DUP	METHOD	314.0	III
21-Jul-2011	SL-081-SA6-SB-4.0-5.0MS	P353039R272340B	MS	METHOD	314.0	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	3050B	6010B	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	3050B	6020	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	3550B	8015B	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	3550B	8015M	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	3550B	8082	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	3550B	8270C	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	3550B	8270C SIM	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	5035	8015M	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	Gen Prep	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
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	METHOD	300.0	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	METHOD	314.0	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	METHOD	6850	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	METHOD	7471A	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	METHOD	8015B	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0	6353040	N	METHOD	8015M	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0DUP	P353040D271601B	DUP	METHOD	300.0	III
21-Jul-2011	SL-081-SA6-SB-9.0-10.0MS	P353040R271615B	MS	METHOD	300.0	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: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

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

Sample ID: DUP05-SA6-QC-072111 ***Collected:*** 7/21/2011 10:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: DUP06-SA6-QC-072111 ***Collected:*** 7/21/2011 12:49:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.81	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.81	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA6-SB-4.0-5.0 ***Collected:*** 7/21/2011 10:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

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

Sample ID: SL-228-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 12:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.81	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.81	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-237-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-240-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 3:01:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-314-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 1:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.80	MDL	1.0	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 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
FLUORIDE	2.8		0.81	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.81	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-316-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.80	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *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		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP05-SA6-QC-072111 *Collected:* 7/21/2011 10:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.90	J	0.321	MDL	10.0	PQL	mg/Kg	U	B

Sample ID: DUP05-SA6-QC-072111 *Collected:* 7/21/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.55	J	0.361	MDL	5.02	PQL	mg/Kg	U	B
POTASSIUM	4110		11.3	MDL	50.2	PQL	mg/Kg	J	Q
SODIUM	85.1	J	5.97	MDL	100	PQL	mg/Kg	J	Z
Zirconium	2.77	J	0.461	MDL	5.02	PQL	mg/Kg	J	Z

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.80	J	0.316	MDL	9.89	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.25	J	0.356	MDL	4.94	PQL	mg/Kg	U	B
POTASSIUM	3450		11.2	MDL	49.4	PQL	mg/Kg	J	Q
SODIUM	69.3	J	5.88	MDL	98.9	PQL	mg/Kg	J	Z
Zirconium	2.49	J	0.455	MDL	4.94	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 10:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.02	J	0.349	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-073-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.682	J	0.392	MDL	5.45	PQL	mg/Kg	U	B
POTASSIUM	2670		12.3	MDL	54.5	PQL	mg/Kg	J	Q
Zirconium	3.46	J	0.501	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 3:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.18	J	0.334	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: SL-081-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.573	J	0.375	MDL	5.21	PQL	mg/Kg	U	B
POTASSIUM	2770		11.8	MDL	52.1	PQL	mg/Kg	J	Q
Zirconium	2.45	J	0.480	MDL	5.21	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA6-SB-9.0-10.0 *Collected:* 7/21/2011 3:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.12	J	0.346	MDL	10.8	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory:** LL

EDD Filename: DE206_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-081-SA6-SB-9.0-10.0 **Collected:** 7/21/2011 3:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.561	J	0.390	MDL	5.41	PQL	mg/Kg	U	B
POTASSIUM	2710		12.2	MDL	54.1	PQL	mg/Kg	J	Q
Zirconium	1.91	J	0.498	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-104-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 2:40:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.76	J	0.340	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-104-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 2:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.608	J	0.382	MDL	5.31	PQL	mg/Kg	U	B
POTASSIUM	2800		12.0	MDL	53.1	PQL	mg/Kg	J	Q
Zirconium	2.20	J	0.489	MDL	5.31	PQL	mg/Kg	U	B

Sample ID: SL-105-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 10:59:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.11	J	0.339	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-105-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 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	0.482	J	0.382	MDL	5.30	PQL	mg/Kg	U	B
POTASSIUM	2650		12.0	MDL	53.0	PQL	mg/Kg	J	Q
Zirconium	2.70	J	0.488	MDL	5.30	PQL	mg/Kg	U	B

Sample ID: SL-228-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 12:39:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.91	J	0.311	MDL	9.71	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory:** LL

EDD Filename: DE206_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-228-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 12:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.30	J	0.349	MDL	4.85	PQL	mg/Kg	U	B
POTASSIUM	3700		11.0	MDL	48.5	PQL	mg/Kg	J	Q
SODIUM	72.0	J	5.78	MDL	97.1	PQL	mg/Kg	J	Z
Zirconium	2.37	J	0.447	MDL	4.85	PQL	mg/Kg	U	B

Sample ID: SL-237-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 2:00:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.89	J	0.326	MDL	10.2	PQL	mg/Kg	U	B

Sample ID: SL-237-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.73	J	0.366	MDL	5.09	PQL	mg/Kg	U	B
POTASSIUM	3200		11.5	MDL	50.9	PQL	mg/Kg	J	Q
SODIUM	77.9	J	6.05	MDL	102	PQL	mg/Kg	J	Z
Zirconium	2.62	J	0.468	MDL	5.09	PQL	mg/Kg	U	B

Sample ID: SL-240-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 3:01:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.88	J	0.325	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-240-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 3:01:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.19	J	0.365	MDL	5.07	PQL	mg/Kg	U	B
POTASSIUM	4990		11.5	MDL	50.7	PQL	mg/Kg	J	Q
SODIUM	73.8	J	6.03	MDL	101	PQL	mg/Kg	J	Z
Zirconium	2.47	J	0.467	MDL	5.07	PQL	mg/Kg	J	Z

Sample ID: SL-314-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 1:14:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.37	J	0.308	MDL	9.64	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-314-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 1:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.91	J	0.347	MDL	4.82	PQL	mg/Kg	U	B
POTASSIUM	4960		10.9	MDL	48.2	PQL	mg/Kg	J	Q
Zirconium	2.92	J	0.443	MDL	4.82	PQL	mg/Kg	J	Z

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 1:37:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.09	J	0.313	MDL	9.79	PQL	mg/Kg	U	B

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 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
BORON	2.81	J	0.352	MDL	4.90	PQL	mg/Kg	U	B
POTASSIUM	3720		11.1	MDL	49.0	PQL	mg/Kg	J	Q
SODIUM	80.7	J	5.83	MDL	97.9	PQL	mg/Kg	J	Z
Zirconium	2.57	J	0.450	MDL	4.90	PQL	mg/Kg	J	Z

Sample ID: SL-316-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.02	J	0.316	MDL	9.88	PQL	mg/Kg	U	B

Sample ID: SL-316-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.97	J	0.356	MDL	4.94	PQL	mg/Kg	U	B
POTASSIUM	3200		11.2	MDL	49.4	PQL	mg/Kg	J	Q
SODIUM	76.7	J	5.88	MDL	98.8	PQL	mg/Kg	J	Z
Zirconium	2.27	J	0.455	MDL	4.94	PQL	mg/Kg	J	Z

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.91	J	0.317	MDL	9.92	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.59	J	0.357	MDL	4.96	PQL	mg/Kg	U	B
POTASSIUM	3880		11.2	MDL	49.6	PQL	mg/Kg	J	Q
SODIUM	80.2	J	5.90	MDL	99.2	PQL	mg/Kg	J	Z
Zirconium	2.68	J	0.456	MDL	4.96	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP05-SA6-QC-072111 *Collected:* 7/21/2011 10:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0565	MDL	0.390	PQL	mg/Kg	J	Z

Sample ID: DUP05-SA6-QC-072111 *Collected:* 7/21/2011 10:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.116	J	0.0721	MDL	0.195	PQL	mg/Kg	J	Z, Q

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0585	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.188	J	0.0746	MDL	0.202	PQL	mg/Kg	J	Z, Q

Sample ID: SL-073-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 10:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0681	J	0.0608	MDL	0.419	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE206 Laboratory: LL

EDD Filename: DE206_v2. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-073-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 10:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0775	U	0.0775	MDL	0.210	PQL	mg/Kg	UJ	Q
SILVER	0.0251	J	0.0149	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 3:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0769	J	0.0629	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 3:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0803	U	0.0803	MDL	0.217	PQL	mg/Kg	UJ	Q
CADMIUM	0.0584	J	0.0477	MDL	0.108	PQL	mg/Kg	J	Z
SILVER	0.0334	J	0.0154	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA6-SB-9.0-10.0 *Collected:* 7/21/2011 3:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0622	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA6-SB-9.0-10.0 *Collected:* 7/21/2011 3:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0793	U	0.0793	MDL	0.214	PQL	mg/Kg	UJ	Q
CADMIUM	0.100	J	0.0472	MDL	0.107	PQL	mg/Kg	J	Z
SILVER	0.0435	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-104-SA6-SB-2.5-3.5 *Collected:* 7/21/2011 2:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0983	J	0.0604	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: SL-104-SA6-SB-2.5-3.5 *Collected:* 7/21/2011 2:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0771	U	0.0771	MDL	0.208	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory:** LL

EDD Filename: DE206_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-104-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 2:40:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0314	J	0.0148	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 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	0.0917	J	0.0621	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 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	0.264		0.0792	MDL	0.214	PQL	mg/Kg	J	Q
CADMIUM	0.0835	J	0.0471	MDL	0.107	PQL	mg/Kg	J	Z
SILVER	0.0298	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 12:39:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.125	J	0.0563	MDL	0.388	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 12:39:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.206		0.0718	MDL	0.194	PQL	mg/Kg	J	Q

Sample ID: SL-237-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 2:00:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.149	J	0.0573	MDL	0.395	PQL	mg/Kg	J	Z

Sample ID: SL-237-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 2:00:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0788	J	0.0731	MDL	0.198	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory:** LL

EDD Filename: DE206_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-240-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 3:01:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0577	MDL	0.398	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 3:01:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0965	J	0.0736	MDL	0.199	PQL	mg/Kg	J	Z, Q

Sample ID: SL-314-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 1:14:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0570	MDL	0.393	PQL	mg/Kg	J	Z

Sample ID: SL-314-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 1:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.104	J	0.0727	MDL	0.197	PQL	mg/Kg	J	Z, Q

Sample ID: SL-315-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 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	0.109	J	0.0585	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: SL-315-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 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	0.115	J	0.0746	MDL	0.202	PQL	mg/Kg	J	Z, Q

Sample ID: SL-316-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 2:20:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.107	J	0.0568	MDL	0.391	PQL	mg/Kg	J	Z

Sample ID: SL-316-SA6-SS-0.0-0.5 ***Collected:*** 7/21/2011 2:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.124	J	0.0724	MDL	0.196	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 Laboratory: LL

EDD Filename: DE206_v2. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 Matrix: SO

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.167	J	0.0581	MDL	0.401	PQL	mg/Kg	J	Z

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.145	J	0.0741	MDL	0.200	PQL	mg/Kg	J	Z, Q

Method Category: METALS

Method: 7199 Matrix: SO

Sample ID: DUP05-SA6-QC-072111 *Collected:* 7/21/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, Q

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.67	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, Q, FD

Sample ID: SL-073-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z, Q

Sample ID: SL-081-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-081-SA6-SB-9.0-10.0 *Collected:* 7/21/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

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

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory:** LL

EDD Filename: DE206_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-104-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 2:40:00 **Analysis Type:** RES **Dilution:** 1

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

Sample ID: SL-105-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 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	0.22	U	0.22	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-228-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 12:39:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.20	U	0.20	MDL	1.0	PQL	mg/Kg	UJ	Q, FD

Sample ID: SL-237-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 2:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, Q

Sample ID: SL-240-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 3:01:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.20	U	0.20	MDL	1.0	PQL	mg/Kg	UJ	Q

Sample ID: SL-314-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 1:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1		0.20	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-315-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 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
HEXAVALENT CHROMIUM	0.51	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z, Q

Sample ID: SL-316-SA6-SS-0.0-0.5 **Collected:** 7/21/2011 2:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.4		0.20	MDL	1.0	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 Laboratory: LL

EDD Filename: DE206_v2. eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *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	0.20	MDL	1.0	PQL	mg/Kg	J	Z, Q

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

Sample ID: DUP05-SA6-QC-072111 *Collected:* 7/21/2011 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0466	J	0.0070	MDL	0.0995	PQL	mg/Kg	J	Z

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0337	J	0.0071	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-104-SA6-SB-2.5-3.5 *Collected:* 7/21/2011 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0307	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA6-SB-2.5-3.5 *Collected:* 7/21/2011 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	0.0137	J	0.0075	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0370	J	0.0071	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-237-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0370	J	0.0070	MDL	0.0996	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE206 Laboratory: LL

EDD Filename: DE206_v2. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-240-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 3:01:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0184	J	0.0066	MDL	0.0942	PQL	mg/Kg	J	Z

Sample ID: SL-314-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 1:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0759	J	0.0066	MDL	0.0941	PQL	mg/Kg	J	Z

Sample ID: SL-316-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0578	J	0.0069	MDL	0.0976	PQL	mg/Kg	J	Z

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0501	J	0.0070	MDL	0.0988	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	11		0.41	MDL	1.2	PQL	mg/Kg	J	FD
EFH (C8-C11)	0.56	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 3:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.97	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA6-SB-9.0-10.0 *Collected:* 7/21/2011 3:20:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.66	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.9		0.41	MDL	1.2	PQL	mg/Kg	J	Q, Q, Q
EFH (C21-C30)	20		0.41	MDL	1.2	PQL	mg/Kg	J	FD
EFH (C8-C11)	0.84	J	0.41	MDL	1.2	PQL	mg/Kg	J	Z, Q, Q

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q
Propylene glycol	5.1	U	5.1	MDL	10	PQL	mg/Kg	UJ	Q

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 1:37:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.4	J	2.0	MDL	6.1	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *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'-DDE	10		0.67	MDL	3.5	PQL	ug/Kg	J	FD
4,4'-DDT	14		0.67	MDL	3.5	PQL	ug/Kg	J	FD

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.15	J	0.037	MDL	0.17	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.35	U	0.35	MDL	0.35	PQL	ug/Kg	UJ	FD
HEPTACHLOR	0.081	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory:** LL

EDD Filename: DE206_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *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'-DDE	3.9		0.34	MDL	1.7	PQL	ug/Kg	J	FD
4,4'-DDT	7.9		0.34	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *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	0.37	U	0.37	MDL	0.37	PQL	ug/Kg	R	Q
DELTA-BHC	0.12	J	0.037	MDL	0.17	PQL	ug/Kg	J	Z
ENDRIN	0.21	U	0.21	MDL	0.35	PQL	ug/Kg	R	Q
ENDRIN KETONE	0.40		0.067	MDL	0.35	PQL	ug/Kg	J	Q, FD
HEPTACHLOR	0.064	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-240-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 3:01:00 *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	0.17	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z, S
4,4'-DDE	0.38		0.067	MDL	0.34	PQL	ug/Kg	J	S
4,4'-DDT	0.87		0.067	MDL	0.34	PQL	ug/Kg	J	S
Chlordane	3.3	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z, S
ENDRIN ALDEHYDE	0.16	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z, S
HEPTACHLOR	0.066	J	0.061	MDL	0.17	PQL	ug/Kg	J	Z, S

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 1:37:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 200

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	51	J	13	MDL	69	PQL	ug/Kg	J	Z

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 1:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	32	J	16	MDL	69	PQL	ug/Kg	J	Z
ENDOSULFAN SULFATE	2.6	J	1.3	MDL	6.9	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	3.0	J	1.3	MDL	6.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-316-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:20:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	4.0	J	1.3	MDL	6.9	PQL	ug/Kg	J	Z

Sample ID: SL-316-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:20:00 *Analysis Type:* DL2-BASE/NEUTRAL *Dilution:* 200

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	19	J	13	MDL	69	PQL	ug/Kg	J	Z

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	5.0	J	1.3	MDL	6.9	PQL	ug/Kg	J	Z

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.33	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	12		0.34	MDL	1.7	PQL	ug/Kg	J	FD
AROCLOR 1260	6.9		0.40	MDL	1.7	PQL	ug/Kg	J	FD
Aroclor 5460	11		1.0	MDL	3.4	PQL	ug/Kg	J	FD

Sample ID: SL-105-SA6-SB-2.5-3.5 *Collected:* 7/21/2011 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
AROCLOR 1254	1.2	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.2	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *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	34		1.7	MDL	8.7	PQL	ug/Kg	J	FD
AROCLOR 1260	2.0	U	2.0	MDL	8.7	PQL	ug/Kg	UJ	FD
Aroclor 5460	22		5.1	MDL	17	PQL	ug/Kg	J	FD

Sample ID: SL-237-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:00:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	14	J	5.1	MDL	17	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.41	U	0.41	MDL	1.2	PQL	ug/Kg	R	Q
DINOSEB	0.82	U	0.82	MDL	2.4	PQL	ug/Kg	R	Q

Sample ID: SL-314-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 1:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.60	J	0.40	MDL	1.2	PQL	ug/Kg	J	Z
MCPP	240	J	75	MDL	250	PQL	ug/Kg	U	B

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 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
DICAMBA	0.75	J	0.41	MDL	1.2	PQL	ug/Kg	J	Z

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	7.2		0.82	MDL	1.7	PQL	ug/Kg	J	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP05-SA6-QC-072111 *Collected:* 7/21/2011 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	21	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	40	J	17	MDL	340	PQL	ug/Kg	J	Z
CHRYSENE	33	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	78	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	18	MDL	370	PQL	ug/Kg	J	Z
CARBAZOLE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
DIBENZOFURAN	23	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	R	Q
BENZO(A)ANTHRACENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	19	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	37	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	22	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	54	J	17	MDL	340	PQL	ug/Kg	J	Z
FLUORANTHENE	94	J	17	MDL	170	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	61	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	85	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-237-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory:** LL

EDD Filename: DE206_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-237-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	19	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-314-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 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(B)FLUORANTHENE	21	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 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(B)FLUORANTHENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
Butylbenzylphthalate	20	J	17	MDL	170	PQL	ug/Kg	J	Z
CHRYSENE	27	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	32	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	32	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-316-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	56	J	17	MDL	340	PQL	ug/Kg	J	Z
CHRYSENE	21	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	27	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	27	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	44	J	17	MDL	340	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: DUP05-SA6-QC-072111 *Collected:* 7/21/2011 10:40:00 *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	1.8	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
ANTHRACENE	5.7	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	56	J	30	MDL	91	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.4	J	3.4	MDL	8.4	PQL	ug/Kg	J	Z
Di-n-butylphthalate	35	J	30	MDL	91	PQL	ug/Kg	J	Z

Sample ID: DUP06-SA6-QC-072111 *Collected:* 7/21/2011 12:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.75	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z, FD
2-METHYLNAPHTHALENE	0.89	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHENE	0.86	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.71	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, FD
ANTHRACENE	2.6		0.34	MDL	1.7	PQL	ug/Kg	J	FD
Butylbenzylphthalate	6.1	U	6.1	MDL	18	PQL	ug/Kg	UJ	FD
DIBENZO(A,H)ANTHRACENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.1	U	6.1	MDL	18	PQL	ug/Kg	UJ	FD
FLUORENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 10:00:00 *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	4.2	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
NAPHTHALENE	5.0	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-104-SA6-SB-2.5-3.5 *Collected:* 7/21/2011 2:40:00 *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	4.6	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.8	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-228-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 12:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.68	U	0.68	MDL	1.7	PQL	ug/Kg	UJ	FD
2-METHYLNAPHTHALENE	0.82	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHENE	0.79	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.3	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, FD
ANTHRACENE	5.8		0.34	MDL	1.7	PQL	ug/Kg	J	Q, FD
Butylbenzylphthalate	8.0	J	6.1	MDL	18	PQL	ug/Kg	J	Z, FD
CHRYSENE	57		0.34	MDL	1.7	PQL	ug/Kg	J	Q, Q
Di-n-butylphthalate	10	J	6.1	MDL	18	PQL	ug/Kg	J	Z, FD
FLUORENE	0.89	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.96	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-237-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.35	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	1.3	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-314-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 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
ACENAPHTHENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.36	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.0	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
FLUORENE	0.70	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.84	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 1:37:00 *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	2.2	J	1.7	MDL	8.5	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.9	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.2	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z
PHENANTHRENE	8.3	J	3.4	MDL	8.5	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-316-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.0	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-318-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 2:41:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.97	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.8	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.0	J	6.1	MDL	18	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-315-SA6-SS-0.0-0.5 *Collected:* 7/21/2011 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
FORMALDEHYDE	750	J	610	MDL	1500	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-105-SA6-SB-2.5-3.5 *Collected:* 7/21/2011 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
METHANOL	320	J	110	MDL	550	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-073-SA6-SB-4.0-5.0 *Collected:* 7/21/2011 10:00:00 *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	13		0.27	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.18	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory:** LL

EDD Filename: DE206_v2. **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-081-SA6-SB-4.0-5.0 **Collected:** 7/21/2011 3:10:00 **Analysis Type:** RES **Dilution:** 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.0	J	7.0	MDL	8.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	12		0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-104-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 2:40:00 **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	10		0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.18	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-105-SA6-SB-2.5-3.5 **Collected:** 7/21/2011 10:59:00 **Analysis Type:** RES **Dilution:** 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.3	J	6.5	MDL	7.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	13		0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE206

Method Blank Outlier Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA21B261345	8/10/2011 1:45:00 PM	N-NITROSODIMETHYLAMINE	40.2 ng/Kg	DUP06-SA6-QC-072111 SL-228-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20908CB221021	8/3/2011 10:21:00 AM	TIN	1.80 mg/Kg	DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5
P20908CB221037	8/2/2011 10:37:00 AM	ALUMINUM BORON CALCIUM IRON MAGNESIUM PHOSPHORUS STRONTIUM	7.99 mg/Kg 1.43 mg/Kg 17.3 mg/Kg 4.29 mg/Kg 1.24 mg/Kg 1.48 mg/Kg 0.101 mg/Kg	DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
DUP05-SA6-QC-072111(REA)	TIN	2.90 mg/Kg	2.90U mg/Kg
DUP05-SA6-QC-072111(RES)	BORON	2.55 mg/Kg	2.55U mg/Kg
DUP06-SA6-QC-072111(REA)	TIN	2.80 mg/Kg	2.80U mg/Kg
DUP06-SA6-QC-072111(RES)	BORON	3.25 mg/Kg	3.25U mg/Kg
SL-073-SA6-SB-4.0-5.0(REA)	TIN	3.02 mg/Kg	3.02U mg/Kg
SL-073-SA6-SB-4.0-5.0(RES)	BORON	0.682 mg/Kg	0.682U mg/Kg
SL-081-SA6-SB-4.0-5.0(REA)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-081-SA6-SB-4.0-5.0(RES)	BORON	0.573 mg/Kg	0.573U mg/Kg
SL-081-SA6-SB-9.0-10.0(REA)	TIN	3.12 mg/Kg	3.12U mg/Kg
SL-081-SA6-SB-9.0-10.0(RES)	BORON	0.561 mg/Kg	0.561U mg/Kg
SL-104-SA6-SB-2.5-3.5(REA)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-104-SA6-SB-2.5-3.5(RES)	BORON	0.608 mg/Kg	0.608U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **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-105-SA6-SB-2.5-3.5(REA)	TIN	3.11 mg/Kg	3.11U mg/Kg
SL-105-SA6-SB-2.5-3.5(RES)	BORON	0.482 mg/Kg	0.482U mg/Kg
SL-228-SA6-SS-0.0-0.5(REA)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-228-SA6-SS-0.0-0.5(RES)	BORON	3.30 mg/Kg	3.30U mg/Kg
SL-237-SA6-SS-0.0-0.5(REA)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-237-SA6-SS-0.0-0.5(RES)	BORON	2.73 mg/Kg	2.73U mg/Kg
SL-240-SA6-SS-0.0-0.5(REA)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-240-SA6-SS-0.0-0.5(RES)	BORON	2.19 mg/Kg	2.19U mg/Kg
SL-314-SA6-SS-0.0-0.5(REA)	TIN	3.37 mg/Kg	3.37U mg/Kg
SL-314-SA6-SS-0.0-0.5(RES)	BORON	3.91 mg/Kg	3.91U mg/Kg
SL-315-SA6-SS-0.0-0.5(REA)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-315-SA6-SS-0.0-0.5(RES)	BORON	2.81 mg/Kg	2.81U mg/Kg
SL-316-SA6-SS-0.0-0.5(REA)	TIN	3.02 mg/Kg	3.02U mg/Kg
SL-316-SA6-SS-0.0-0.5(RES)	BORON	1.97 mg/Kg	1.97U mg/Kg
SL-318-SA6-SS-0.0-0.5(REA)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-318-SA6-SS-0.0-0.5(RES)	BORON	2.59 mg/Kg	2.59U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P20926CB220753A	8/1/2011 7:53:00 AM	COPPER LEAD	0.126 mg/Kg 0.0214 mg/Kg	DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15156AB242338A	8/4/2011 11:38:00 PM	2,4,5-T MCPP	0.085 ug/Kg 81 ug/Kg	DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-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-314-SA6-SS-0.0-0.5(RES)	MCPP	240 ug/Kg	250U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB25B211049A	7/26/2011 10:49:00 AM	METHYLENE CHLORIDE	1.7 ug/Kg	SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-073-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	13 ug/Kg	13U ug/Kg
SL-081-SA6-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	12 ug/Kg	12U ug/Kg
SL-104-SA6-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	10 ug/Kg	10U ug/Kg
SL-105-SA6-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	13 ug/Kg	13U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	13 47 -	13 44 60	59.00-109.00 63.00-107.00 63.00-107.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	ETHANOL Isopropanol METHANOL	- - -	- - -	48.00-130.00 12.00-149.00 43.00-138.00	53 (20.00) 89 (20.00) 55 (20.00)	ETHANOL Isopropanol 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-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	EFH (C30-C40)	476	318	49.00-123.00	-	EFH (C30-C40)	No Qual, >4x
SL-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	EFH (C15-C20) EFH (C21-C30) EFH (C8-C11)	-66 -268 12	16 -38 0	49.00-123.00 49.00-123.00 49.00-123.00	23 (20.00) 29 (20.00) -	EFH (C15-C20) EFH (C21-C30) EFH (C8-C11)	J(all detects) R(all non-detects) EFH (C21-C30), No Qual, >4x

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	DIELDRIN	-	162	19.00-154.00	-	DIELDRIN	J(all detects)
SL-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	4,4'-DDD 4,4'-DDE 4,4'-DDT ENDRIN	- - 8 0	0 -70 -27 -	16.00-163.00 18.00-161.00 10.00-176.00 11.00-149.00	200 (50.00) - - 200 (50.00)	4,4'-DDD 4,4'-DDE 4,4'-DDT ENDRIN	J(all detects) R(all non-detects) 4,4'-DDE, 4,4'-DDT, No Qual, >4x
SL-228-SA6-SS-0.0-0.5MS (SL-228-SA6-SS-0.0-0.5)	ENDRIN KETONE	17	-	22.00-165.00	-	ENDRIN KETONE	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
SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	2,4-D MCPA	- -	- -	17.00-180.00 10.00-213.00	39 (35.00) 127 (50.00)	2,4-D MCPA	J(all detects)

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **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-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	DICAMBA DINOSEB	0 0	- 7	10.00-190.00 10.00-46.00	200 (50.00) 200 (35.00)	DICAMBA DINOSEB	J(all detects) R(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-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	ANTIMONY	26	24	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike = 97%
SL-228-SA6-SS-0.0-0.5MSD (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	ZINC	-	55	75.00-125.00	-	ZINC	No Qual, >4x
SL-228-SA6-SS-0.0-0.5MSD (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	BARIUM	-	67	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **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-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	ALUMINUM CALCIUM MAGNESIUM MANGANESE POTASSIUM TITANIUM	1762 190 271 189 140 306	1447 174 133 - - 269	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM CALCIUM MAGNESIUM MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Ca, Mg, Mn, Ti, No Qual, >4x
SL-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	IRON	1318	25	75.00-125.00	-	IRON	No Qual, >4x
SL-228-SA6-SS-0.0-0.5MSD (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	PHOSPHORUS	-	62	75.00-125.00	-	PHOSPHORUS	No Qual, >4x

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	ANTHRACENE	-	117	73.00-115.00	-	ANTHRACENE	J(all detects)
	BENZO(A)ANTHRACENE	-	170	59.00-128.00	-	BENZO(A)ANTHRACENE	
	BENZO(B)FLUORANTHENE	-	219	54.00-163.00	36 (30.00)	BENZO(B)FLUORANTHENE	
	BENZO(K)FLUORANTHENE	-	190	57.00-153.00	32 (30.00)	BENZO(K)FLUORANTHENE	
	CHRYSENE	-	246	67.00-123.00	44 (30.00)	CHRYSENE	
	FLUORANTHENE	197	438	51.00-149.00	50 (30.00)	FLUORANTHENE	
	PHENANTHRENE	131	150	62.00-122.00	-	PHENANTHRENE	
	PYRENE	160	317	51.00-131.00	43 (30.00)	PYRENE	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **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-228-SA6-SS-0.0-0.5MS (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	FLUORIDE	58	-	80.00-120.00	-	FLUORIDE	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-228-SA6-SS-0.0-0.5MS SL-228-SA6-SS-0.0-0.5MSD (SL-228-SA6-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)

Method: 7199
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-228-SA6-SS-0.0-0.5MS (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	HEXAVALENT CHROMIUM	72	-	75.00-125.00	-	HEXAVALENT CHROMIUM	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-228-SA6-SS-0.0-0.5DUP (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL -073-SA6-SB-4.0-5.0 SL -228-SA6-SS-0.0-0.5 SL -237-SA6-SS-0.0-0.5 SL -240-SA6-SS-0.0-0.5 SL -314-SA6-SS-0.0-0.5 SL -315-SA6-SS-0.0-0.5 SL -316-SA6-SS-0.0-0.5 SL -318-SA6-SS-0.0-0.5)	FLUORIDE	34	20.00	No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE206 Laboratory: LL

EDD Filename: DE206_v2. 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
P20926CQ220756A (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	ANTIMONY	59	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P20908CQ221041 (DUP05-SA6-QC-072111 DUP06-SA6-QC-072111 SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-081-SA6-SB-9.0-10.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5 SL-228-SA6-SS-0.0-0.5 SL-237-SA6-SS-0.0-0.5 SL-240-SA6-SS-0.0-0.5 SL-314-SA6-SS-0.0-0.5 SL-315-SA6-SS-0.0-0.5 SL-316-SA6-SS-0.0-0.5 SL-318-SA6-SS-0.0-0.5)	ALUMINUM TITANIUM	137 161	- -	80.00-120.00 80.00-120.00	- -	ALUMINUM TITANIUM	No Qual, SRM within QC Limits

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB25Q211111A LCSB25Y211134A (SL-073-SA6-SB-4.0-5.0 SL-081-SA6-SB-4.0-5.0 SL-104-SA6-SB-2.5-3.5 SL-105-SA6-SB-2.5-3.5)	1,1,2-TRICHLORO-1,2,2-TRIFLU 1,1-DICHLOROETHENE	140 124	134 124	61.00-126.00 73.00-123.00	- -	1,1,2-TRICHLORO-1,2,2-TRIFL 1,1-DICHLOROETHENE	J(all detects)

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE206 Laboratory: LL

EDD Filename: DE206_v2. eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-240-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	130	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-237-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	41	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-314-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	0	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-316-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	0	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-318-SA6-SS-0.0 -0.5	DECACHLOROBIPHENYL	0	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
SL-318-SA6-SS-0.0 -0.5 .	2,4-Dichlorophenylacetic acid	169	36.00-156.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
MOISTURE	1.9	1.8	5		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
FLUORIDE	2.1	2.9	32	50.00	No Qualifiers Applied
Nitrate-NO3	1.1	1.1	0	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
ALUMINUM	14500	13800	5	50.00	No Qualifiers Applied
BORON	3.30	3.25	2	50.00	
CALCIUM	2910	2800	4	50.00	
IRON	18400	17200	7	50.00	
LITHIUM	21.2	20.4	4	50.00	
MAGNESIUM	4020	3830	5	50.00	
MANGANESE	322	307	5	50.00	
PHOSPHORUS	433	410	5	50.00	
POTASSIUM	3700	3450	7	50.00	
SODIUM	72.0	69.3	4	50.00	
STRONTIUM	24.2	23.1	5	50.00	
TIN	2.91	2.80	4	50.00	
TITANIUM	971	935	4	50.00	
Zirconium	2.37	2.49	5	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
ANTIMONY	0.206	0.188	9	50.00	No Qualifiers Applied
ARSENIC	3.57	3.33	7	50.00	
BARIUM	108	99.6	8	50.00	
BERYLLIUM	0.537	0.498	8	50.00	
CADMIUM	0.559	0.485	14	50.00	
CHROMIUM	19.9	18.1	9	50.00	
COBALT	6.19	5.47	12	50.00	
COPPER	12.5	11.5	8	50.00	
LEAD	21.2	19.7	7	50.00	
MOLYBDENUM	0.592	0.547	8	50.00	
NICKEL	14.9	14.2	5	50.00	
SELENIUM	0.125	0.117	7	50.00	
SILVER	0.512	0.490	4	50.00	
THALLIUM	0.286	0.236	19	50.00	
VANADIUM	31.3	28.7	9	50.00	
ZINC	78.7	76.5	3	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
HEXAVALENT CHROMIUM	1.0 U	0.67	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
MERCURY	0.0370	0.0337	9	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
EFH (C15-C20)	4.9	3.4	36	50.00	No Qualifiers Applied
EFH (C30-C40)	36	30	18	50.00	
EFH (C8-C11)	0.84	0.56	40	50.00	
EFH (C21-C30)	20	11	58	50.00	J(all detects)

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
Chlordane	3.7	4.1	10	50.00	No Qualifiers Applied
DELTA-BHC	0.12	0.15	22	50.00	
HEPTACHLOR	0.064	0.081	23	50.00	
4,4'-DDE	3.9	10	88	50.00	J(all detects) UJ(all non-detects)
4,4'-DDT	7.9	14	56	50.00	
ENDRIN KETONE	0.40	0.35 U	200	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-228-SA6-SS-0.0-0.5	DUP06-SA6-QC-072111			
AROCLOR 1254	34	12	96	50.00	J(all detects) UJ(all non-detects)
AROCLOR 1260	8.7 U	6.9	200	50.00	
Aroclor 5460	22	11	67	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-228-SA6-SS-0.0-0.5	Concentration (ug/Kg) DUP06-SA6-QC-072111	Sample RPD	eQAPP RPD	Flag
2-METHYLNAPHTHALENE	0.82	0.89	8	50.00	No Qualifiers Applied
ACENAPHTHENE	0.79	0.86	8	50.00	
DIBENZO(A,H)ANTHRACENE	1.7	1.2	34	50.00	
FLUORENE	0.89	1.0	12	50.00	
NAPHTHALENE	0.96	1.0	4	50.00	
1-METHYLNAPHTHALENE	1.7 U	0.75	200	50.00	J(all detects) UJ(all non-detects)
ACENAPHTHYLENE	1.3	0.71	59	50.00	
ANTHRACENE	5.8	2.6	76	50.00	
Butylbenzylphthalate	8.0	18 U	200	50.00	
Di-n-butylphthalate	10	18 U	200	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg) SL-228-SA6-SS-0.0-0.5	Concentration (ug/Kg) DUP06-SA6-QC-072111	Sample RPD	eQAPP RPD	Flag
BIS(2-ETHYLHEXYL)PHTHALATE	54	40	30	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-228-SA6-SS-0.0-0.5	Concentration (pH unit) DUP06-SA6-QC-072111	Sample RPD	eQAPP RPD	Flag
PH	6.78	7.00	3	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP06-SA6-QC-072111	Nitrate-NO3	J	1.1	1.5	PQL	mg/Kg	J (all detects)
SL-228-SA6-SS-0.0-0.5	Nitrate-NO3	J	1.1	1.5	PQL	mg/Kg	J (all detects)
SL-315-SA6-SS-0.0-0.5	Nitrate-NO3	J	1.3	1.5	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA6-QC-072111	BORON	J	2.55	5.02	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.1	100	PQL	mg/Kg	
	TIN	J	2.90	10.0	PQL	mg/Kg	
	Zirconium	J	2.77	5.02	PQL	mg/Kg	
DUP06-SA6-QC-072111	BORON	J	3.25	4.94	PQL	mg/Kg	J (all detects)
	SODIUM	J	69.3	98.9	PQL	mg/Kg	
	TIN	J	2.80	9.89	PQL	mg/Kg	
	Zirconium	J	2.49	4.94	PQL	mg/Kg	
SL-073-SA6-SB-4.0-5.0	BORON	J	0.682	5.45	PQL	mg/Kg	J (all detects)
	TIN	J	3.02	10.9	PQL	mg/Kg	
	Zirconium	J	3.46	5.45	PQL	mg/Kg	
SL-081-SA6-SB-4.0-5.0	BORON	J	0.573	5.21	PQL	mg/Kg	J (all detects)
	TIN	J	3.18	10.4	PQL	mg/Kg	
	Zirconium	J	2.45	5.21	PQL	mg/Kg	
SL-081-SA6-SB-9.0-10.0	BORON	J	0.561	5.41	PQL	mg/Kg	J (all detects)
	TIN	J	3.12	10.8	PQL	mg/Kg	
	Zirconium	J	1.91	5.41	PQL	mg/Kg	
SL-104-SA6-SB-2.5-3.5	BORON	J	0.608	5.31	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	10.6	PQL	mg/Kg	
	Zirconium	J	2.20	5.31	PQL	mg/Kg	
SL-105-SA6-SB-2.5-3.5	BORON	J	0.482	5.30	PQL	mg/Kg	J (all detects)
	TIN	J	3.11	10.6	PQL	mg/Kg	
	Zirconium	J	2.70	5.30	PQL	mg/Kg	
SL-228-SA6-SS-0.0-0.5	BORON	J	3.30	4.85	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.0	97.1	PQL	mg/Kg	
	TIN	J	2.91	9.71	PQL	mg/Kg	
	Zirconium	J	2.37	4.85	PQL	mg/Kg	
SL-237-SA6-SS-0.0-0.5	BORON	J	2.73	5.09	PQL	mg/Kg	J (all detects)
	SODIUM	J	77.9	102	PQL	mg/Kg	
	TIN	J	2.89	10.2	PQL	mg/Kg	
	Zirconium	J	2.62	5.09	PQL	mg/Kg	
SL-240-SA6-SS-0.0-0.5	BORON	J	2.19	5.07	PQL	mg/Kg	J (all detects)
	SODIUM	J	73.8	101	PQL	mg/Kg	
	TIN	J	2.88	10.1	PQL	mg/Kg	
	Zirconium	J	2.47	5.07	PQL	mg/Kg	
SL-314-SA6-SS-0.0-0.5	BORON	J	3.91	4.82	PQL	mg/Kg	J (all detects)
	TIN	J	3.37	9.64	PQL	mg/Kg	
	Zirconium	J	2.92	4.82	PQL	mg/Kg	
SL-315-SA6-SS-0.0-0.5	BORON	J	2.81	4.90	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.7	97.9	PQL	mg/Kg	
	TIN	J	3.09	9.79	PQL	mg/Kg	
	Zirconium	J	2.57	4.90	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-316-SA6-SS-0.0-0.5	BORON	J	1.97	4.94	PQL	mg/Kg	J (all detects)
	SODIUM	J	76.7	98.8	PQL	mg/Kg	
	TIN	J	3.02	9.88	PQL	mg/Kg	
	Zirconium	J	2.27	4.94	PQL	mg/Kg	
SL-318-SA6-SS-0.0-0.5	BORON	J	2.59	4.96	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.2	99.2	PQL	mg/Kg	
	TIN	J	2.91	9.92	PQL	mg/Kg	
	Zirconium	J	2.68	4.96	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA6-QC-072111	ANTIMONY	J	0.116	0.195	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.129	0.390	PQL	mg/Kg	
DUP06-SA6-QC-072111	ANTIMONY	J	0.188	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.117	0.403	PQL	mg/Kg	
SL-073-SA6-SB-4.0-5.0	SELENIUM	J	0.0681	0.419	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0251	0.105	PQL	mg/Kg	
SL-081-SA6-SB-4.0-5.0	CADMIUM	J	0.0584	0.108	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0769	0.434	PQL	mg/Kg	
	SILVER	J	0.0334	0.108	PQL	mg/Kg	
SL-081-SA6-SB-9.0-10.0	CADMIUM	J	0.100	0.107	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.119	0.429	PQL	mg/Kg	
	SILVER	J	0.0435	0.107	PQL	mg/Kg	
SL-104-SA6-SB-2.5-3.5	SELENIUM	J	0.0983	0.417	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0314	0.104	PQL	mg/Kg	
SL-105-SA6-SB-2.5-3.5	CADMIUM	J	0.0835	0.107	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0917	0.428	PQL	mg/Kg	
	SILVER	J	0.0298	0.107	PQL	mg/Kg	
SL-228-SA6-SS-0.0-0.5	SELENIUM	J	0.125	0.388	PQL	mg/Kg	J (all detects)
SL-237-SA6-SS-0.0-0.5	ANTIMONY	J	0.0788	0.198	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.149	0.395	PQL	mg/Kg	
SL-240-SA6-SS-0.0-0.5	ANTIMONY	J	0.0965	0.199	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.166	0.398	PQL	mg/Kg	
SL-314-SA6-SS-0.0-0.5	ANTIMONY	J	0.104	0.197	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.139	0.393	PQL	mg/Kg	
SL-315-SA6-SS-0.0-0.5	ANTIMONY	J	0.115	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.109	0.403	PQL	mg/Kg	
SL-316-SA6-SS-0.0-0.5	ANTIMONY	J	0.124	0.196	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.107	0.391	PQL	mg/Kg	
SL-318-SA6-SS-0.0-0.5	ANTIMONY	J	0.145	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.167	0.401	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA6-QC-072111	HEXAVALENT CHROMIUM	J	0.46	1.0	PQL	mg/Kg	J (all detects)
DUP06-SA6-QC-072111	HEXAVALENT CHROMIUM	J	0.67	1.0	PQL	mg/Kg	J (all detects)
SL-073-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-237-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.49	1.0	PQL	mg/Kg	J (all detects)
SL-315-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.51	1.0	PQL	mg/Kg	J (all detects)
SL-318-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA6-QC-072111	MERCURY	J	0.0466	0.0995	PQL	mg/Kg	J (all detects)
DUP06-SA6-QC-072111	MERCURY	J	0.0337	0.102	PQL	mg/Kg	J (all detects)
SL-104-SA6-SB-2.5-3.5	MERCURY	J	0.0307	0.101	PQL	mg/Kg	J (all detects)
SL-105-SA6-SB-2.5-3.5	MERCURY	J	0.0137	0.106	PQL	mg/Kg	J (all detects)
SL-228-SA6-SS-0.0-0.5	MERCURY	J	0.0370	0.101	PQL	mg/Kg	J (all detects)
SL-237-SA6-SS-0.0-0.5	MERCURY	J	0.0370	0.0996	PQL	mg/Kg	J (all detects)
SL-240-SA6-SS-0.0-0.5	MERCURY	J	0.0184	0.0942	PQL	mg/Kg	J (all detects)
SL-314-SA6-SS-0.0-0.5	MERCURY	J	0.0759	0.0941	PQL	mg/Kg	J (all detects)
SL-316-SA6-SS-0.0-0.5	MERCURY	J	0.0578	0.0976	PQL	mg/Kg	J (all detects)
SL-318-SA6-SS-0.0-0.5	MERCURY	J	0.0501	0.0988	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-105-SA6-SB-2.5-3.5	METHANOL	J	320	550	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP06-SA6-QC-072111	EFH (C8-C11)	J	0.56	1.2	PQL	mg/Kg	J (all detects)
SL-081-SA6-SB-4.0-5.0	EFH (C30-C40)	J	0.97	1.3	PQL	mg/Kg	J (all detects)
SL-081-SA6-SB-9.0-10.0	EFH (C30-C40)	J	0.66	1.3	PQL	mg/Kg	J (all detects)
SL-228-SA6-SS-0.0-0.5	EFH (C8-C11)	J	0.84	1.2	PQL	mg/Kg	J (all detects)
SL-315-SA6-SS-0.0-0.5	EFH (C15-C20)	J	3.4	6.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP06-SA6-QC-072111	DELTA-BHC	J	0.15	0.17	PQL	ug/Kg	J (all detects)
	HEPTACHLOR	J	0.081	0.17	PQL	ug/Kg	
SL-228-SA6-SS-0.0-0.5	DELTA-BHC	J	0.12	0.17	PQL	ug/Kg	J (all detects)
	HEPTACHLOR	J	0.064	0.17	PQL	ug/Kg	
SL-240-SA6-SS-0.0-0.5	4,4'-DDD	J	0.17	0.34	PQL	ug/Kg	J (all detects)
	Chlordane	J	3.3	3.4	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.16	0.34	PQL	ug/Kg	
	HEPTACHLOR	J	0.066	0.17	PQL	ug/Kg	
SL-315-SA6-SS-0.0-0.5	Chlordane	J	32	69	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	51	69	PQL	ug/Kg	
	ENDOSULFAN SULFATE	J	2.6	6.9	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	3.0	6.9	PQL	ug/Kg	
SL-316-SA6-SS-0.0-0.5	4,4'-DDD	J	4.0	6.9	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	19	69	PQL	ug/Kg	
SL-318-SA6-SS-0.0-0.5	4,4'-DDD	J	5.0	6.9	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.33	0.35	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-105-SA6-SB-2.5-3.5	AROCLOR 1254	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.2	3.6	PQL	ug/Kg	
SL-237-SA6-SS-0.0-0.5	Aroclor 5460	J	14	17	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA6-SS-0.0-0.5	DICAMBA	J	0.60	1.2	PQL	ug/Kg	J (all detects)
	MCPP	J	240	250	PQL	ug/Kg	
SL-315-SA6-SS-0.0-0.5	DICAMBA	J	0.75	1.2	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-073-SA6-SB-4.0-5.0	TOLUENE	J	0.18	4.4	PQL	ug/Kg	J (all detects)
SL-081-SA6-SB-4.0-5.0	ACETONE	J	8.0	8.4	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.12	4.2	PQL	ug/Kg	
SL-104-SA6-SB-2.5-3.5	TOLUENE	J	0.18	4.2	PQL	ug/Kg	J (all detects)
SL-105-SA6-SB-2.5-3.5	ACETONE	J	7.3	7.8	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.10	3.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA6-QC-072111	BENZO(G,H,I)PERYLENE	J	21	170	PQL	ug/Kg	J (all detects)
DUP06-SA6-QC-072111	BIS(2-ETHYLHEXYL)PHTHALATE	J	40	340	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	33	170	PQL	ug/Kg	
SL-073-SA6-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	78	180	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	370	PQL	ug/Kg	
	CARBAZOLE	J	22	180	PQL	ug/Kg	
	DIBENZOFURAN	J	23	180	PQL	ug/Kg	
SL-228-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	17	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	19	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	37	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	18	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	22	170	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	54	340	PQL	ug/Kg	
	FLUORANTHENE	J	94	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	17	170	PQL	ug/Kg	
	PHENANTHRENE	J	61	170	PQL	ug/Kg	
	PYRENE	J	85	170	PQL	ug/Kg	
SL-237-SA6-SS-0.0-0.5	CHRYSENE	J	18	170	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	19	170	PQL	ug/Kg	
	PYRENE	J	18	170	PQL	ug/Kg	
SL-314-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	21	170	PQL	ug/Kg	J (all detects)
SL-315-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	20	170	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	20	170	PQL	ug/Kg	
	CHRYSENE	J	27	170	PQL	ug/Kg	
	FLUORANTHENE	J	32	170	PQL	ug/Kg	
	PYRENE	J	32	170	PQL	ug/Kg	
SL-316-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	20	170	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	56	340	PQL	ug/Kg	
	CHRYSENE	J	21	170	PQL	ug/Kg	
	FLUORANTHENE	J	27	170	PQL	ug/Kg	
	PYRENE	J	27	170	PQL	ug/Kg	
SL-318-SA6-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	20	170	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	44	340	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA6-QC-072111	ACENAPHTHYLENE	J	1.8	8.4	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	5.7	8.4	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	56	91	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	3.4	8.4	PQL	ug/Kg	
	Di-n-butylphthalate	J	35	91	PQL	ug/Kg	
DUP06-SA6-QC-072111	1-METHYLNAPHTHALENE	J	0.75	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.89	1.7	PQL	ug/Kg	
	ACENAPHTHENE	J	0.86	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.71	1.7	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	FLUORENE	J	1.0	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.7	PQL	ug/Kg	
SL-073-SA6-SB-4.0-5.0	2-METHYLNAPHTHALENE	J	4.2	9.2	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	5.0	9.2	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE206 **Laboratory: LL**

EDD Filename: DE206_v2. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-104-SA6-SB-2.5-3.5	ANTHRACENE	J	4.6	9.0	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	3.8	9.0	PQL	ug/Kg	
SL-228-SA6-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.82	1.7	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	0.79	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.3	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.0	18	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	18	PQL	ug/Kg	
	FLUORENE	J	0.89	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.96	1.7	PQL	ug/Kg	
SL-237-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	0.35	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.3	1.7	PQL	ug/Kg	
SL-314-SA6-SS-0.0-0.5	ACENAPHTHENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.36	1.7	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	
	FLUORENE	J	0.70	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.84	1.7	PQL	ug/Kg	
SL-315-SA6-SS-0.0-0.5	ANTHRACENE	J	2.2	8.5	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	4.9	8.5	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	7.2	8.5	PQL	ug/Kg	
	PHENANTHRENE	J	8.3	8.5	PQL	ug/Kg	
SL-316-SA6-SS-0.0-0.5	ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.7	PQL	ug/Kg	
SL-318-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	0.97	1.7	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.8	18	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.0	18	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-315-SA6-SS-0.0-0.5	FORMALDEHYDE	J	750	1500	PQL	ug/Kg	J (all detects)

LDC #: 26407F4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-21-11
SDG #: DE206 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CC
2nd Reviewer: MG

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

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

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

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

Validated Samples:

1	SL-228-SA6-SS-0.0-0.5	11	SL-081-SA6-SB-4.0-5.0	21		31	
2	SL-237-SA6-SS-0.0-0.5	12	SL-081-SA6-SB-9.0-10.0	22		32	
3	SL-240-SA6-SS-0.0-0.5	13	SL-104-SA6-SB-2.5-3.5	23		33	
4	SL-314-SA6-SS-0.0-0.5	14	SL-105-SA6-SB-2.5-3.5	24		34	
5	SL-315-SA6-SS-0.0-0.5	15	SL-228-SA6-SS-0.0-0.5MS	25		35	
6	SL-316-SA6-SS-0.0-0.5	16	SL-228-SA6-SS-0.0-0.5MSD	26		36	
7	SL-318-SA6-SS-0.0-0.5	17	SL-228-SA6-SS-0.0-0.5DUP	27		37	
8	DUP06-SA6-QC-072111	18		28		38	
9	DUP05-SA6-QC-072111	19		29		39	
10	SL-073-SA6-SB-4.0-5.0	20		30		40	

Notes: _____

LDC #: 26407F4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS:2xdil
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 2

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	2													
Zr	6.5	3.25	2.6													

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 1, 13, 14

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	13	14											
Zr	6.7	3.35	2.4	2.2	2.7											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE206
Matrix: SOIL Level (low/med): LOW

>4x

Background Lab Sample ID: 6353026BKG Matrix Spike Lab Sample ID: 6353027MS Matrix Spike Duplicate Lab Sample ID: 6353028MSD
% Solids for Sample: 98.1
Batch Id(s): P20908C, P20926C, P20911D

Sb: J/UJ/A (PS=97%)

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		14508.4841		17996.8578		17429.6020		197.9355	201.8550	MG/KG	1762		1447		3			20	P
Antimony	121	0.2064		0.5186		0.4883		1.1876	1.1876	MG/KG	26	N	24	N	6		75 - 125	20	MS
Arsenic	75	3.5707		5.3304		5.1265		1.9794	1.9794	MG/KG	89		79		4		75 - 125	20	MS
Barium	137	107.7035		117.0987		114.3474		9.8968	9.8968	MG/KG	95		67		2			20	MS
Beryllium	9	0.5374		1.2541		1.2424		0.7917	0.7917	MG/KG	91		89		1		75 - 125	20	MS
Boron		3.2960	B	191.7629		200.7802		197.9355	201.8550	MG/KG	95		98		5		84 - 115	20	P
Cadmium	111	0.5586		1.4208		1.3798		0.9897	0.9897	MG/KG	87		83		3		75 - 125	20	MS
Calcium		2909.6646		3661.2897		3613.8997		395.8711	403.7101	MG/KG	190		174		1			20	P
Chromium	52	19.9019		28.2256		27.6516		9.8968	9.8968	MG/KG	84		78		2		75 - 125	20	MS
Cobalt	59	6.1939		52.7498		52.4925		49.4839	49.4839	MG/KG	94		94		0		75 - 125	20	MS
Copper	63	12.5081		21.9708		21.6541		9.8968	9.8968	MG/KG	96		92		1		75 - 125	20	MS
Iron		18353.0372		19657.3172		18378.5822		98.9678	100.9275	MG/KG	1318		25		7			20	P
Lead	208	21.2029		23.6533		23.5741		2.9690	2.9690	MG/KG	83		80		0			20	MS
Lithium		21.2087		120.5180		122.9984		98.9678	100.9275	MG/KG	100		101		2		82 - 114	20	P
Magnesium		4022.1834		4558.3940		4290.0243		197.9355	201.8550	MG/KG	271		133		6			20	P
Manganese		321.6077		415.2737		374.9508		49.4839	50.4638	MG/KG	189		106		10			20	P
Mercury		0.0370	B	0.2097		0.2037		0.1651	0.1670	MG/KG	105		100		3		65 - 135	20	CV
Molybdenum	98	0.5920		10.0927		9.9581		9.8968	9.8968	MG/KG	96		95		1		75 - 125	20	MS
Nickel	60	14.8847		25.0388		24.5836		9.8968	9.8968	MG/KG	103		98		2		75 - 125	20	MS
Phosphorus		432.8372		534.7308		494.9153		98.9678	100.9275	MG/KG	103		62		8			20	P
Potassium		3696.0973		5084.7372		4855.5273		989.6777	1009.2752	MG/KG	140	N	115		5		75 - 125	20	P
Selenium	78	0.1254	B	2.0546		2.0407		1.9794	1.9794	MG/KG	97		97		1		75 - 125	20	MS
Silver	107	0.5118		10.5876		10.3698		9.8968	9.8968	MG/KG	102		100		2		75 - 125	20	MS
Sodium		72.0373	B	1022.2984		1054.8218		989.6777	1009.2752	MG/KG	96		97		3		75 - 125	20	P
Strontium		24.1872		121.0010		124.0208		98.9678	100.9275	MG/KG	98		99		2		75 - 115	20	P
Thallium	203	0.2864		0.6207		0.6498		0.3959	0.3959	MG/KG	84		92		5		75 - 125	20	MS
Tin		2.9135	B	365.6899		375.6189		395.8711	403.7101	MG/KG	92		92		3		80 - 110	20	P
Titanium		970.9936		1274.0556		1242.7670		98.9678	100.9275	MG/KG	306		269		2			20	P
Vanadium	51	31.3189		39.7455		38.7162		9.8968	9.8968	MG/KG	85		75		3		75 - 125	20	MS
Zinc	66	78.6952		86.6958		84.1226		9.8968	9.8968	MG/KG	81		55		3			20	MS
Zirconium		2.3708	B	90.3348		94.4783		98.9678	100.9275	MG/KG	89		91		4		75 - 125	20	P

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

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

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QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE206
Matrix: SOIL Level (low/med): LOW

<5x

Background Lab Sample ID: 6353026BKG
% Solids for Duplicate: 98.1
Batch ID(s): P20908C, P20926C, P20911D
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6353029DUP
% Solids for Sample: 98.1

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			14508.4841		14706.1909		1		P
Antimony	121	0.2	0.2064		0.2095		1		MS
Arsenic	75		3.5707		3.5244		1		MS
Barium	137		107.7035		103.5315		4		MS
Beryllium	9		0.5374		0.5167		4		MS
Boron			3.2960	B	3.3387	B	1		P
Cadmium	111		0.5586		0.4947		12		MS
Calcium			2909.6646		3272.4811		12		P
Chromium	52		19.9019		18.6272		7		MS
Cobalt	59		6.1939		5.5732		11		MS
Copper	63		12.5081		12.6361		1		MS
Iron			18353.0372		19538.7319		6		P
Lead	208		21.2029		21.4976		1		MS
Lithium			21.2087		21.8044		3		P
Magnesium			4022.1834		4311.9428		7		P
Manganese			321.6077		348.0082		8		P
Mercury			0.0370	B	0.0341	B	8		CV
Molybdenum	98		0.5920		0.5947		0		MS
Nickel	60		14.8847		14.7536		1		MS
Phosphorus			432.8372		430.7567		0		P
Potassium			3696.0973		3737.9205		1		P
Selenium	78		0.1254	B	0.1438	B	14		MS
Silver	107		0.5118		0.5499		7		MS
Sodium			72.0373	B	72.9080	B	1		P
Strontium			24.1872		25.2763		4		P
Thallium	203	0.1	0.2864		0.2541		12		MS
Tin			2.9135	B	2.7271	B	7		P
Titanium			970.9936		988.4065		2		P
Vanadium	51		31.3189		30.2984		3		MS
Zinc	66		78.6952		76.9673		2		MS
Zirconium			2.3708	B	2.5868	B	9		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE207

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-Jul-2011	TB-072211	6354167	TB	5030B	8015M	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3050B	6010B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3060A	7199	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3546	1625C	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3550B	8015B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3550B	8015M	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3550B	8081A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3550B	8082	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3550B	8151A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3550B	8270C	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	3550B	8270C SIM	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	8330	8330A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	METHOD	300.0	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	METHOD	314.0	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	METHOD	7471A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	METHOD	8015B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	METHOD	8015M	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	METHOD	8315A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5	6354150	N	METHOD	9012B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5DUP	P354150D220319	DUP	3050B	6010B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5DUP	P354150D220742	DUP	METHOD	7471A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5DUP	P354150D221039A	DUP	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5DUP	P354150D221039B	DUP	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5DUP	P354150D221039C	DUP	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5DUP	P354150D221039D	DUP	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
22-Jul-2011	SL-233-SA6-SS-0.0-0.5DUP	P354150D221713	DUP	3050B	6010B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5DUP	P354150D271945A	DUP	METHOD	300.0	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M220328	MSD	3050B	6010B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M220745	MSD	METHOD	7471A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M221045A	MSD	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M221045B	MSD	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M221045C	MSD	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M221045D	MSD	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M221720	MSD	3050B	6010B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M240133A	MSD	3550B	8081A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M241849A	MSD	3550B	8082	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M261608	MSD	3550B	8270C	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M262342	MSD	3550B	8270C SIM	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M321109A	MSD	3550B	8015M	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MSD	P354150M322323A	MSD	METHOD	8015B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R220323	MS	3050B	6010B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R220744	MS	METHOD	7471A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R221042A	MS	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R221042B	MS	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R221042C	MS	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R221042D	MS	3050B	6020	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R221717	MS	3050B	6010B	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R240118A	MS	3550B	8081A	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R241831A	MS	3550B	8082	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R261543	MS	3550B	8270C	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R262309	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
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R271959A	MS	METHOD	300.0	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R321044A	MS	3550B	8015M	III
22-Jul-2011	SL-233-SA6-SS-0.0-0.5MS	P354150R322309A	MS	METHOD	8015B	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	3050B	6010B	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	3050B	6020	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	3060A	7199	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	3550B	8015B	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	3550B	8015M	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	3550B	8082	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	3550B	8270C	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	3550B	8270C SIM	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	5035	8015M	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	METHOD	300.0	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	METHOD	314.0	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	METHOD	6850	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	METHOD	7471A	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	METHOD	8015B	III
22-Jul-2011	SL-103-SA6-SB-4.0-5.0	6354161	N	METHOD	8015M	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	3050B	6010B	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	3050B	6020	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	3060A	7199	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	3550B	8015B	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	3550B	8015M	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	3550B	8082	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	3550B	8270C	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	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
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	5035	8015M	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	METHOD	300.0	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	METHOD	314.0	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	METHOD	6850	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	METHOD	7471A	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	METHOD	8015B	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0	6354162	N	METHOD	8015M	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0DUP	P354162D271845B	DUP	METHOD	314.0	III
22-Jul-2011	SL-103-SA6-SB-9.0-10.0MS	P354162R271931B	MS	METHOD	314.0	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	3050B	6010B	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	3050B	6020	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	3060A	7199	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	3550B	8081A	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	3550B	8082	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	3550B	8151A	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	3550B	8270C	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	3550B	8270C SIM	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	METHOD	300.0	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	METHOD	314.0	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	METHOD	6850	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5	6354151	N	METHOD	7471A	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5DUP	P354151D271613A	DUP	3060A	7199	III
22-Jul-2011	SL-238-SA6-SS-0.0-0.5MS	P354151R271022A	MS	3060A	7199	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	3050B	6010B	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	3050B	6020	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	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
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	3550B	8015B	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	3550B	8015M	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	3550B	8082	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	3550B	8270C	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	3550B	8270C SIM	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	5035	8015M	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	METHOD	300.0	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	METHOD	314.0	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	METHOD	6850	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	METHOD	7471A	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	METHOD	8015B	III
22-Jul-2011	SL-082-SA6-SB-4.0-5.0	6354159	N	METHOD	8015M	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	3050B	6010B	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	3050B	6020	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	3060A	7199	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	3550B	8015B	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	3550B	8015M	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	3550B	8082	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	3550B	8270C	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	3550B	8270C SIM	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	5035	8015M	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	METHOD	300.0	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	METHOD	314.0	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	METHOD	6850	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	METHOD	7471A	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	METHOD	8015B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Jul-2011	SL-082-SA6-SB-9.0-10.0	6354160	N	METHOD	8015M	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0DUP	P354160D272304B	DUP	METHOD	300.0	III
22-Jul-2011	SL-082-SA6-SB-9.0-10.0MS	P354160R272318B	MS	METHOD	300.0	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	3050B	6010B	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	3050B	6020	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	3060A	7199	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	3550B	8081A	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	3550B	8082	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	3550B	8151A	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	3550B	8270C	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	3550B	8270C SIM	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	METHOD	300.0	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	METHOD	314.0	III
22-Jul-2011	SL-241-SA6-SS-0.0-0.5	6354152	N	METHOD	7471A	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	3050B	6010B	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	3050B	6020	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	3060A	7199	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	3550B	8015B	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	3550B	8015M	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	3550B	8082	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	3550B	8270C	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	3550B	8270C SIM	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	5035	8015M	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	METHOD	300.0	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	METHOD	314.0	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	METHOD	6850	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	METHOD	7471A	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	METHOD	8015B	III
22-Jul-2011	SL-124-SA6-SB-4.0-5.0	6354163	N	METHOD	8015M	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	3050B	6010B	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	3050B	6020	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	3060A	7199	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	3550B	8015B	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	3550B	8015M	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	3550B	8082	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	3550B	8270C	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	3550B	8270C SIM	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	5035	8015M	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	METHOD	300.0	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	METHOD	314.0	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	METHOD	6850	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	METHOD	7471A	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	METHOD	8015B	III
22-Jul-2011	SL-124-SA6-SB-12.5-13.5	6354164	N	METHOD	8015M	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	3050B	6010B	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	3050B	6020	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	3060A	7199	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	3550B	8081A	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	3550B	8082	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	3550B	8151A	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	3550B	8270C	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	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
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	METHOD	300.0	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	METHOD	314.0	III
22-Jul-2011	SL-308-SA6-SS-0.0-0.5	6354157	N	METHOD	7471A	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	3050B	6010B	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	3050B	6020	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	3060A	7199	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	3550B	8081A	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	3550B	8082	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	3550B	8151A	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	3550B	8270C	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	3550B	8270C SIM	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	METHOD	300.0	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	METHOD	314.0	III
22-Jul-2011	SL-307-SA6-SS-0.0-0.5	6354156	N	METHOD	7471A	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	3050B	6010B	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	3050B	6020	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	3060A	7199	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	3550B	8081A	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	3550B	8082	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	3550B	8151A	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	3550B	8270C	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	3550B	8270C SIM	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	METHOD	300.0	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	METHOD	314.0	III
22-Jul-2011	SL-309-SA6-SS-0.0-0.5	6354158	N	METHOD	7471A	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	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
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	3050B	6020	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	3060A	7199	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	3550B	8081A	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	3550B	8082	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	3550B	8151A	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	3550B	8270C	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	3550B	8270C SIM	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	METHOD	300.0	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	METHOD	314.0	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	METHOD	6850	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5	6354154	N	METHOD	7471A	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5DUP	P354154D271345A	DUP	METHOD	314.0	III
22-Jul-2011	SL-243-SA6-SS-0.0-0.5MS	P354154R271408A	MS	METHOD	314.0	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	3050B	6010B	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	3050B	6020	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	3060A	7199	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	3550B	8015B	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	3550B	8015M	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	3550B	8082	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	3550B	8270C	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	3550B	8270C SIM	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	5035	8015M	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	METHOD	300.0	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	METHOD	314.0	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	METHOD	6850	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	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
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	METHOD	8015B	III
22-Jul-2011	SL-075-SA6-SB-4.0-5.0	6354165	N	METHOD	8015M	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	3050B	6010B	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	3050B	6020	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	3060A	7199	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	3550B	8081A	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	3550B	8082	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	3550B	8151A	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	3550B	8270C	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	3550B	8270C SIM	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	METHOD	300.0	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	METHOD	314.0	III
22-Jul-2011	SL-244-SA6-SS-0.0-0.5	6354155	N	METHOD	7471A	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	3050B	6010B	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	3050B	6020	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	3060A	7199	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	3550B	8015B	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	3550B	8015M	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	3550B	8082	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	3550B	8270C	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	3550B	8270C SIM	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	5035	8015M	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	METHOD	300.0	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	METHOD	314.0	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	METHOD	6850	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	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
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	METHOD	8015B	III
22-Jul-2011	SL-075-SA6-SB-9.0-10.0	6354166	N	METHOD	8015M	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	3050B	6010B	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	3050B	6020	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	3060A	7199	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	3550B	8081A	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	3550B	8082	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	3550B	8151A	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	3550B	8270C	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	3550B	8270C SIM	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	METHOD	300.0	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	N	METHOD	314.0	III
22-Jul-2011	SL-242-SA6-SS-0.0-0.5	6354153	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: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-075-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 3:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.06	J	0.390	MDL	5.41	PQL	mg/Kg	U	B

Sample ID: SL-075-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	477		0.379	MDL	10.8	PQL	mg/Kg	J	Q
TIN	2.52	J	0.346	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.22	J	0.498	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 3:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.854	J	0.385	MDL	5.35	PQL	mg/Kg	U	B

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	454		0.374	MDL	10.7	PQL	mg/Kg	J	Q
TIN	2.38	J	0.342	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.85	J	0.492	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.73	J	0.374	MDL	5.20	PQL	mg/Kg	U	B

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	324		0.364	MDL	10.4	PQL	mg/Kg	J	Q
TIN	2.33	J	0.333	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.38	J	0.478	MDL	5.20	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-082-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 10:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.35	J	0.382	MDL	5.30	PQL	mg/Kg	U	B

Sample ID: SL-082-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	406		0.371	MDL	10.6	PQL	mg/Kg	J	Q
TIN	2.78	J	0.339	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.24	J	0.488	MDL	5.30	PQL	mg/Kg	U	B

Sample ID: SL-103-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 8:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.46	J	0.377	MDL	5.24	PQL	mg/Kg	U	B

Sample ID: SL-103-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	381		0.367	MDL	10.5	PQL	mg/Kg	J	Q
TIN	2.67	J	0.336	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.00	J	0.482	MDL	5.24	PQL	mg/Kg	U	B

Sample ID: SL-103-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 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
BORON	1.41	J	0.391	MDL	5.43	PQL	mg/Kg	U	B

Sample ID: SL-103-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	368		0.380	MDL	10.9	PQL	mg/Kg	J	Q
TIN	2.46	J	0.347	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.04	J	0.499	MDL	5.43	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-124-SA6-SB-12.5-13.5 **Collected:** 7/22/2011 11:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	347		0.375	MDL	10.7	PQL	mg/Kg	J	Q
TIN	2.44	J	0.343	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.79	J	0.492	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA6-SB-4.0-5.0 **Collected:** 7/22/2011 11:45:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.56	J	0.383	MDL	5.32	PQL	mg/Kg	U	B

Sample ID: SL-124-SA6-SB-4.0-5.0 **Collected:** 7/22/2011 11:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	458		0.372	MDL	10.6	PQL	mg/Kg	J	Q
TIN	2.89	J	0.340	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.56	J	0.489	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA6-SS-0.0-0.5 **Collected:** 7/22/2011 8:09:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.63	J	0.356	MDL	4.94	PQL	mg/Kg	U	B

Sample ID: SL-233-SA6-SS-0.0-0.5 **Collected:** 7/22/2011 8:09:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	345		0.346	MDL	9.89	PQL	mg/Kg	J	Q
SODIUM	61.1	J	5.88	MDL	98.9	PQL	mg/Kg	J	Z
TIN	2.45	J	0.316	MDL	9.89	PQL	mg/Kg	U	B
Zirconium	2.43	J	0.455	MDL	4.94	PQL	mg/Kg	U	B

Sample ID: SL-238-SA6-SS-0.0-0.5 **Collected:** 7/22/2011 8:56:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.32	J	0.360	MDL	5.01	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-238-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	423		0.350	MDL	10.0	PQL	mg/Kg	J	Q
SODIUM	80.2	J	5.96	MDL	100	PQL	mg/Kg	J	Z
TIN	2.89	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	2.85	J	0.461	MDL	5.01	PQL	mg/Kg	U	B

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.23	J	0.363	MDL	5.04	PQL	mg/Kg	U	B

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	457		0.353	MDL	10.1	PQL	mg/Kg	J	Q
TIN	2.07	J	0.323	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.17		0.353	MDL	4.90	PQL	mg/Kg	U	B

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	523		1.71	MDL	49.0	PQL	mg/Kg	J	Q
SODIUM	182	J	29.1	MDL	490	PQL	mg/Kg	J	Z
TIN	3.18	J	1.57	MDL	49.0	PQL	mg/Kg	U	B
Zirconium	6.60	J	2.25	MDL	24.5	PQL	mg/Kg	J	Z

Sample ID: SL-243-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:52:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.36	J	0.355	MDL	4.94	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-243-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	424		0.346	MDL	9.87	PQL	mg/Kg	J	Q
SODIUM	67.3	J	5.88	MDL	98.7	PQL	mg/Kg	J	Z
TIN	2.72	J	0.316	MDL	9.87	PQL	mg/Kg	U	B
Zirconium	2.90	J	0.454	MDL	4.94	PQL	mg/Kg	U	B

Sample ID: SL-244-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:08:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.33	J	0.356	MDL	4.94	PQL	mg/Kg	U	B

Sample ID: SL-244-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	474		0.346	MDL	9.89	PQL	mg/Kg	J	Q
SODIUM	68.2	J	5.88	MDL	98.9	PQL	mg/Kg	J	Z
TIN	2.79	J	0.316	MDL	9.89	PQL	mg/Kg	U	B
Zirconium	2.89	J	0.455	MDL	4.94	PQL	mg/Kg	U	B

Sample ID: SL-307-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:12:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.22	J	0.357	MDL	4.96	PQL	mg/Kg	U	B

Sample ID: SL-307-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	404		0.347	MDL	9.92	PQL	mg/Kg	J	Q
SODIUM	69.8	J	5.90	MDL	99.2	PQL	mg/Kg	J	Z
TIN	2.64	J	0.318	MDL	9.92	PQL	mg/Kg	U	B
Zirconium	2.40	J	0.456	MDL	4.96	PQL	mg/Kg	U	B

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.97		0.364	MDL	5.06	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	321		0.354	MDL	10.1	PQL	mg/Kg	J	Q
SODIUM	74.0	J	6.02	MDL	101	PQL	mg/Kg	J	Z
TIN	2.33	J	0.324	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.21	J	0.466	MDL	5.06	PQL	mg/Kg	U	B

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.10	J	0.353	MDL	4.90	PQL	mg/Kg	U	B

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	549		0.343	MDL	9.80	PQL	mg/Kg	J	Q
SODIUM	73.1	J	5.83	MDL	98.0	PQL	mg/Kg	J	Z
TIN	2.79	J	0.314	MDL	9.80	PQL	mg/Kg	U	B
Zirconium	2.87	J	0.451	MDL	4.90	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-075-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 3:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.164	J	0.0634	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 3:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.682		0.0546	MDL	0.109	PQL	mg/Kg	J	E

Sample ID: SL-075-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 3:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.116	MDL	0.437	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-075-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 3:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.173	J	0.0809	MDL	0.219	PQL	mg/Kg	J	Z, Q
ARSENIC	6.14		0.0874	MDL	0.437	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.712		0.0175	MDL	0.109	PQL	mg/Kg	J	E
CHROMIUM	25.9		0.131	MDL	0.437	PQL	mg/Kg	J	Q, E, A
COBALT	8.84		0.0219	MDL	0.109	PQL	mg/Kg	J	E, A
COPPER	15.1		0.0874	MDL	0.437	PQL	mg/Kg	J	Q, E, A
LEAD	9.04		0.0111	MDL	0.219	PQL	mg/Kg	J	E, A
NICKEL	16.4		0.109	MDL	0.437	PQL	mg/Kg	J	E, A
SILVER	0.0553	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	55.0		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, Q, E, A
ZINC	74.8		0.612	MDL	3.28	PQL	mg/Kg	J	E, A

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 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	0.125	J	0.0608	MDL	0.419	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 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	0.727		0.0524	MDL	0.105	PQL	mg/Kg	J	E

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 3:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	80.5		0.111	MDL	0.419	PQL	mg/Kg	J	E, A

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 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	0.159	J	0.0776	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	6.59		0.0839	MDL	0.419	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.505		0.0168	MDL	0.105	PQL	mg/Kg	J	E
CHROMIUM	19.6		0.126	MDL	0.419	PQL	mg/Kg	J	Q, E, A
COBALT	7.84		0.0210	MDL	0.105	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 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
COPPER	11.9		0.0839	MDL	0.419	PQL	mg/Kg	J	Q, E, A
LEAD	6.46		0.0107	MDL	0.210	PQL	mg/Kg	J	E, A
NICKEL	11.9		0.105	MDL	0.419	PQL	mg/Kg	J	E, A
SILVER	0.0374	J	0.0149	MDL	0.105	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	38.7		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, Q, E, A
ZINC	57.8		0.587	MDL	3.15	PQL	mg/Kg	J	E, A

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0885	J	0.0591	MDL	0.408	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.591		0.0510	MDL	0.102	PQL	mg/Kg	J	E

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.9		0.108	MDL	0.408	PQL	mg/Kg	J	E, A

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.132	J	0.0755	MDL	0.204	PQL	mg/Kg	J	Z, Q
ARSENIC	5.48		0.0816	MDL	0.408	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.629		0.0163	MDL	0.102	PQL	mg/Kg	J	E
CADMIUM	0.0569	J	0.0449	MDL	0.102	PQL	mg/Kg	J	Z
CHROMIUM	20.0		0.122	MDL	0.408	PQL	mg/Kg	J	Q, E, A
COBALT	5.97		0.0204	MDL	0.102	PQL	mg/Kg	J	E, A
COPPER	9.26		0.0816	MDL	0.408	PQL	mg/Kg	J	Q, E, A
LEAD	5.24		0.0104	MDL	0.204	PQL	mg/Kg	J	E, A
NICKEL	12.6		0.102	MDL	0.408	PQL	mg/Kg	J	E, A
SILVER	0.0359	J	0.0145	MDL	0.102	PQL	mg/Kg	J	Z, Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-082-SA6-SB-4.0-5.0 **Collected:** 7/22/2011 10:00:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	38.5		0.0224	MDL	0.102	PQL	mg/Kg	J	Q, Q, E, A
ZINC	61.4		0.571	MDL	3.06	PQL	mg/Kg	J	E, A

Sample ID: SL-082-SA6-SB-9.0-10.0 **Collected:** 7/22/2011 10:10:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0858	J	0.0621	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA6-SB-9.0-10.0 **Collected:** 7/22/2011 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
MOLYBDENUM	0.570		0.0535	MDL	0.107	PQL	mg/Kg	J	E

Sample ID: SL-082-SA6-SB-9.0-10.0 **Collected:** 7/22/2011 10:10:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	89.4		0.113	MDL	0.428	PQL	mg/Kg	J	E, A

Sample ID: SL-082-SA6-SB-9.0-10.0 **Collected:** 7/22/2011 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	0.166	J	0.0792	MDL	0.214	PQL	mg/Kg	J	Z, Q
ARSENIC	5.09		0.0856	MDL	0.428	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.677		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CADMIUM	0.0890	J	0.0471	MDL	0.107	PQL	mg/Kg	J	Z
CHROMIUM	21.9		0.128	MDL	0.428	PQL	mg/Kg	J	Q, E, A
COBALT	6.41		0.0214	MDL	0.107	PQL	mg/Kg	J	E, A
COPPER	9.77		0.0856	MDL	0.428	PQL	mg/Kg	J	Q, E, A
LEAD	4.98		0.0109	MDL	0.214	PQL	mg/Kg	J	E, A
NICKEL	14.0		0.107	MDL	0.428	PQL	mg/Kg	J	E, A
SILVER	0.0232	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	42.6		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, Q, E, A
ZINC	72.3		0.599	MDL	3.21	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-103-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 8:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0614	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-103-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 8:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.612		0.0529	MDL	0.106	PQL	mg/Kg	J	E

Sample ID: SL-103-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 8:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.3		0.112	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: SL-103-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 8:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.134	J	0.0784	MDL	0.212	PQL	mg/Kg	J	Z, Q
ARSENIC	5.62		0.0847	MDL	0.424	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.709		0.0169	MDL	0.106	PQL	mg/Kg	J	E
CHROMIUM	22.0		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E, A
COBALT	7.85		0.0212	MDL	0.106	PQL	mg/Kg	J	E, A
COPPER	10.5		0.0847	MDL	0.424	PQL	mg/Kg	J	Q, E, A
LEAD	5.97		0.0108	MDL	0.212	PQL	mg/Kg	J	E, A
NICKEL	15.6		0.106	MDL	0.424	PQL	mg/Kg	J	E, A
SILVER	0.0287	J	0.0150	MDL	0.106	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	43.0		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, Q, E, A
ZINC	72.6		0.593	MDL	3.18	PQL	mg/Kg	J	E, A

Sample ID: SL-103-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 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	0.430		0.0537	MDL	0.107	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-103-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 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	85.7		0.114	MDL	0.430	PQL	mg/Kg	J	E, A

Sample ID: SL-103-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 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	0.0908	J	0.0795	MDL	0.215	PQL	mg/Kg	J	Z, Q
ARSENIC	3.91		0.0860	MDL	0.430	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.504		0.0172	MDL	0.107	PQL	mg/Kg	J	E
CADMIUM	0.0789	J	0.0473	MDL	0.107	PQL	mg/Kg	J	Z
CHROMIUM	17.6		0.129	MDL	0.430	PQL	mg/Kg	J	Q, E, A
COBALT	5.26		0.0215	MDL	0.107	PQL	mg/Kg	J	E, A
COPPER	7.31		0.0860	MDL	0.430	PQL	mg/Kg	J	Q, E, A
LEAD	3.53		0.0110	MDL	0.215	PQL	mg/Kg	J	E, A
NICKEL	11.3		0.107	MDL	0.430	PQL	mg/Kg	J	E, A
SILVER	0.0216	J	0.0153	MDL	0.107	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	31.9		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, Q, E, A
ZINC	55.2		0.602	MDL	3.22	PQL	mg/Kg	J	E, A

Sample ID: SL-124-SA6-SB-12.5-13.5 *Collected:* 7/22/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0621	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA6-SB-12.5-13.5 *Collected:* 7/22/2011 11:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.958		0.0535	MDL	0.107	PQL	mg/Kg	J	E

Sample ID: SL-124-SA6-SB-12.5-13.5 *Collected:* 7/22/2011 11:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	103		0.113	MDL	0.428	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-124-SA6-SB-12.5-13.5 *Collected:* 7/22/2011 11:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.325		0.0792	MDL	0.214	PQL	mg/Kg	J	Q
ARSENIC	9.43		0.0856	MDL	0.428	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.662		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CHROMIUM	22.7		0.128	MDL	0.428	PQL	mg/Kg	J	Q, E, A
COBALT	13.1		0.0214	MDL	0.107	PQL	mg/Kg	J	E, A
COPPER	18.2		0.0856	MDL	0.428	PQL	mg/Kg	J	Q, E, A
LEAD	11.1		0.0109	MDL	0.214	PQL	mg/Kg	J	E, A
NICKEL	18.7		0.107	MDL	0.428	PQL	mg/Kg	J	E, A
SILVER	0.0509	J	0.0152	MDL	0.107	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	47.0		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, Q, E, A
ZINC	76.3		0.599	MDL	3.21	PQL	mg/Kg	J	E, A

Sample ID: SL-124-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 11:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0611	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 11:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.67		0.0527	MDL	0.105	PQL	mg/Kg	J	E

Sample ID: SL-124-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 11:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	89.6		0.112	MDL	0.421	PQL	mg/Kg	J	E, A

Sample ID: SL-124-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 11:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.343		0.0779	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	8.69		0.0842	MDL	0.421	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.573		0.0168	MDL	0.105	PQL	mg/Kg	J	E
CHROMIUM	19.8		0.126	MDL	0.421	PQL	mg/Kg	J	Q, E, A
COBALT	10.7		0.0211	MDL	0.105	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-124-SA6-SB-4.0-5.0 ***Collected:*** 7/22/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	23.2		0.0842	MDL	0.421	PQL	mg/Kg	J	Q, E, A
LEAD	9.65		0.0107	MDL	0.211	PQL	mg/Kg	J	E, A
NICKEL	16.4		0.105	MDL	0.421	PQL	mg/Kg	J	E, A
SILVER	0.0473	J	0.0150	MDL	0.105	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	43.3		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, Q, E, A
ZINC	70.2		0.590	MDL	3.16	PQL	mg/Kg	J	E, A

Sample ID: SL-233-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 8:09:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0562	MDL	0.388	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 8:09:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.33		0.0485	MDL	0.0970	PQL	mg/Kg	J	E

Sample ID: SL-233-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 8:09:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.103	MDL	0.388	PQL	mg/Kg	J	E, A

Sample ID: SL-233-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 8:09:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.365		0.0718	MDL	0.194	PQL	mg/Kg	J	Q
ARSENIC	5.90		0.0776	MDL	0.388	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.676		0.0155	MDL	0.0970	PQL	mg/Kg	J	E
CHROMIUM	22.6		0.116	MDL	0.388	PQL	mg/Kg	J	Q, E, A
COBALT	6.71		0.0194	MDL	0.0970	PQL	mg/Kg	J	E, A
COPPER	14.5		0.0776	MDL	0.388	PQL	mg/Kg	J	Q, E, A
LEAD	12.6		0.0099	MDL	0.194	PQL	mg/Kg	J	E, A
NICKEL	84.5		0.0970	MDL	0.388	PQL	mg/Kg	J	E, A
SILVER	5.38		0.0138	MDL	0.0970	PQL	mg/Kg	J	Q, E, A
VANADIUM	37.9		0.0213	MDL	0.0970	PQL	mg/Kg	J	Q, Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-233-SA6-SS-0.0-0.5 **Collected:** 7/22/2011 8:09:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	134		0.543	MDL	2.91	PQL	mg/Kg	J	E, A

Sample ID: SL-238-SA6-SS-0.0-0.5 **Collected:** 7/22/2011 8:56:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.220	J	0.0581	MDL	0.400	PQL	mg/Kg	J	Z

Sample ID: SL-238-SA6-SS-0.0-0.5 **Collected:** 7/22/2011 8:56:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.837		0.0501	MDL	0.100	PQL	mg/Kg	J	E

Sample ID: SL-238-SA6-SS-0.0-0.5 **Collected:** 7/22/2011 8:56:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.106	MDL	0.400	PQL	mg/Kg	J	E, A

Sample ID: SL-238-SA6-SS-0.0-0.5 **Collected:** 7/22/2011 8:56:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.223		0.0741	MDL	0.200	PQL	mg/Kg	J	Q
ARSENIC	8.27		0.0801	MDL	0.400	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.911		0.0160	MDL	0.100	PQL	mg/Kg	J	E
CHROMIUM	29.9		0.120	MDL	0.400	PQL	mg/Kg	J	Q, E, A
COBALT	10.1		0.0200	MDL	0.100	PQL	mg/Kg	J	E, A
COPPER	17.1		0.0801	MDL	0.400	PQL	mg/Kg	J	Q, E, A
LEAD	17.1		0.0102	MDL	0.200	PQL	mg/Kg	J	E, A
NICKEL	25.5		0.100	MDL	0.400	PQL	mg/Kg	J	E, A
SILVER	0.180		0.0142	MDL	0.100	PQL	mg/Kg	J	Q, E, A
VANADIUM	50.0		0.0220	MDL	0.100	PQL	mg/Kg	J	Q, Q, E, A
ZINC	89.5		0.561	MDL	3.00	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	150		1.37	MDL	7.35	PQL	mg/Kg	J	E, A

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0812	J	0.0568	MDL	0.392	PQL	mg/Kg	J	Z

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.793		0.0490	MDL	0.0979	PQL	mg/Kg	J	E

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	164		0.104	MDL	0.392	PQL	mg/Kg	J	E, A

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.254		0.0725	MDL	0.196	PQL	mg/Kg	J	Q
ARSENIC	6.38		0.0784	MDL	0.392	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.514		0.0157	MDL	0.0979	PQL	mg/Kg	J	E
CHROMIUM	19.4		0.118	MDL	0.392	PQL	mg/Kg	J	Q, E, A
COBALT	7.59		0.0196	MDL	0.0979	PQL	mg/Kg	J	E, A
COPPER	13.6		0.0784	MDL	0.392	PQL	mg/Kg	J	Q, E, A
LEAD	10.5		0.010	MDL	0.196	PQL	mg/Kg	J	E, A
NICKEL	15.2		0.0979	MDL	0.392	PQL	mg/Kg	J	E, A
SILVER	0.0339	J	0.0139	MDL	0.0979	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	41.2		0.0215	MDL	0.0979	PQL	mg/Kg	J	Q, Q, E, A

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	153		1.39	MDL	7.42	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.118	J	0.0574	MDL	0.396	PQL	mg/Kg	J	Z

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.813		0.0495	MDL	0.0989	PQL	mg/Kg	J	E

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	164		0.105	MDL	0.396	PQL	mg/Kg	J	E, A

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.266		0.0732	MDL	0.198	PQL	mg/Kg	J	Q
ARSENIC	6.72		0.0791	MDL	0.396	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.716		0.0158	MDL	0.0989	PQL	mg/Kg	J	E
CHROMIUM	21.4		0.119	MDL	0.396	PQL	mg/Kg	J	Q, E, A
COBALT	8.80		0.0198	MDL	0.0989	PQL	mg/Kg	J	E, A
COPPER	14.1		0.0791	MDL	0.396	PQL	mg/Kg	J	Q, E, A
LEAD	11.0		0.0101	MDL	0.198	PQL	mg/Kg	J	E, A
NICKEL	17.6		0.0989	MDL	0.396	PQL	mg/Kg	J	E, A
SILVER	0.126		0.0140	MDL	0.0989	PQL	mg/Kg	J	Q, E, A
VANADIUM	43.4		0.0218	MDL	0.0989	PQL	mg/Kg	J	Q, Q, E, A

Sample ID: SL-243-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:52:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.192	J	0.0578	MDL	0.399	PQL	mg/Kg	J	Z

Sample ID: SL-243-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:52:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.883		0.0499	MDL	0.0997	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-243-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 2:52:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.106	MDL	0.399	PQL	mg/Kg	J	E, A

Sample ID: SL-243-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 2:52:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.252		0.0738	MDL	0.199	PQL	mg/Kg	J	Q
ARSENIC	6.67		0.0798	MDL	0.399	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.923		0.0160	MDL	0.0997	PQL	mg/Kg	J	E
CHROMIUM	27.6		0.120	MDL	0.399	PQL	mg/Kg	J	Q, E, A
COBALT	8.40		0.0199	MDL	0.0997	PQL	mg/Kg	J	E, A
COPPER	15.2		0.0798	MDL	0.399	PQL	mg/Kg	J	Q, E, A
LEAD	17.2		0.0102	MDL	0.199	PQL	mg/Kg	J	E, A
NICKEL	22.0		0.0997	MDL	0.399	PQL	mg/Kg	J	E, A
SILVER	0.234		0.0142	MDL	0.0997	PQL	mg/Kg	J	Q, E, A
VANADIUM	45.1		0.0219	MDL	0.0997	PQL	mg/Kg	J	Q, Q, E, A
ZINC	88.2		0.558	MDL	2.99	PQL	mg/Kg	J	E, A

Sample ID: SL-244-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 3:08:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.149	J	0.0568	MDL	0.392	PQL	mg/Kg	J	Z

Sample ID: SL-244-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 3:08:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.10		0.0490	MDL	0.0979	PQL	mg/Kg	J	E

Sample ID: SL-244-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 3:08:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.104	MDL	0.392	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-244-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 3:08:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.197		0.0725	MDL	0.196	PQL	mg/Kg	J	Q
ARSENIC	4.75		0.0783	MDL	0.392	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.708		0.0157	MDL	0.0979	PQL	mg/Kg	J	E
CHROMIUM	21.7		0.118	MDL	0.392	PQL	mg/Kg	J	Q, E, A
COBALT	6.90		0.0196	MDL	0.0979	PQL	mg/Kg	J	E, A
COPPER	14.7		0.0783	MDL	0.392	PQL	mg/Kg	J	Q, E, A
LEAD	26.8		0.010	MDL	0.196	PQL	mg/Kg	J	E, A
NICKEL	17.8		0.0979	MDL	0.392	PQL	mg/Kg	J	E, A
SILVER	0.431		0.0139	MDL	0.0979	PQL	mg/Kg	J	Q, E, A
VANADIUM	38.5		0.0215	MDL	0.0979	PQL	mg/Kg	J	Q, Q, E, A
ZINC	154		0.548	MDL	2.94	PQL	mg/Kg	J	E, A

Sample ID: SL-307-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 2:12:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.158	J	0.0564	MDL	0.389	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 2:12:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.775		0.0487	MDL	0.0973	PQL	mg/Kg	J	E

Sample ID: SL-307-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 2:12:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	133		0.103	MDL	0.389	PQL	mg/Kg	J	E, A

Sample ID: SL-307-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 2:12:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.190	J	0.0720	MDL	0.195	PQL	mg/Kg	J	Z, Q
ARSENIC	5.63		0.0779	MDL	0.389	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.786		0.0156	MDL	0.0973	PQL	mg/Kg	J	E
CHROMIUM	25.6		0.117	MDL	0.389	PQL	mg/Kg	J	Q, E, A
COBALT	7.41		0.0195	MDL	0.0973	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-307-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:12:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	13.5		0.0779	MDL	0.389	PQL	mg/Kg	J	Q, E, A
LEAD	34.2		0.0099	MDL	0.195	PQL	mg/Kg	J	E, A
NICKEL	19.4		0.0973	MDL	0.389	PQL	mg/Kg	J	E, A
SILVER	0.200		0.0138	MDL	0.0973	PQL	mg/Kg	J	Q, E, A
VANADIUM	43.3		0.0214	MDL	0.0973	PQL	mg/Kg	J	Q, Q, E, A
ZINC	94.2		0.545	MDL	2.92	PQL	mg/Kg	J	E, A

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.211	J	0.0581	MDL	0.401	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.796		0.0501	MDL	0.100	PQL	mg/Kg	J	E

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.106	MDL	0.401	PQL	mg/Kg	J	E, A

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.212		0.0742	MDL	0.200	PQL	mg/Kg	J	Q
ARSENIC	6.06		0.0802	MDL	0.401	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.761		0.0160	MDL	0.100	PQL	mg/Kg	J	E
CHROMIUM	25.9		0.120	MDL	0.401	PQL	mg/Kg	J	Q, E, A
COBALT	7.50		0.0200	MDL	0.100	PQL	mg/Kg	J	E, A
COPPER	12.3		0.0802	MDL	0.401	PQL	mg/Kg	J	Q, E, A
LEAD	8.51		0.0102	MDL	0.200	PQL	mg/Kg	J	E, A
NICKEL	19.0		0.100	MDL	0.401	PQL	mg/Kg	J	E, A
SILVER	0.0522	J	0.0142	MDL	0.100	PQL	mg/Kg	J	Z, Q, E, A
VANADIUM	41.2		0.0221	MDL	0.100	PQL	mg/Kg	J	Q, Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	72.9		0.561	MDL	3.01	PQL	mg/Kg	J	E, A

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.193	J	0.0563	MDL	0.388	PQL	mg/Kg	J	Z

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.864		0.0485	MDL	0.0970	PQL	mg/Kg	J	E

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.103	MDL	0.388	PQL	mg/Kg	J	E, A

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.256		0.0718	MDL	0.194	PQL	mg/Kg	J	Q
ARSENIC	5.78		0.0776	MDL	0.388	PQL	mg/Kg	J	Q, Q, E
BERYLLIUM	0.776		0.0155	MDL	0.0970	PQL	mg/Kg	J	E
CHROMIUM	23.8		0.116	MDL	0.388	PQL	mg/Kg	J	Q, E, A
COBALT	7.49		0.0194	MDL	0.0970	PQL	mg/Kg	J	E, A
COPPER	14.7		0.0776	MDL	0.388	PQL	mg/Kg	J	Q, E, A
LEAD	22.6		0.0099	MDL	0.194	PQL	mg/Kg	J	E, A
NICKEL	19.7		0.0970	MDL	0.388	PQL	mg/Kg	J	E, A
SILVER	0.341		0.0138	MDL	0.0970	PQL	mg/Kg	J	Q, E, A
VANADIUM	41.5		0.0213	MDL	0.0970	PQL	mg/Kg	J	Q, Q, E, A
ZINC	99.3		0.543	MDL	2.91	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-238-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.64	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-244-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.67	J	0.20	MDL	1.0	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 3:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0155	J	0.0075	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-238-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.010	J	0.0068	MDL	0.0964	PQL	mg/Kg	J	Z

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0346	J	0.0070	MDL	0.0993	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0193	J	0.0069	MDL	0.0982	PQL	mg/Kg	J	Z

Sample ID: SL-243-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0156	J	0.0069	MDL	0.0987	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0090	J	0.0070	MDL	0.100	PQL	mg/Kg	J	Z

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0239	J	0.0069	MDL	0.0983	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-103-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 8:45:00 *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)	0.74	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:09:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q
Propylene glycol	5.0	U	5.0	MDL	10	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-233-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 8:09:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.12	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-238-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 8:56:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.23	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z
Chlordane	2.1	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-241-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 11:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.25	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.084	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-242-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 3:27:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.096	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-244-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 3:08:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
gamma-BHC (Lindane)	0.036	J	0.034	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-307-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 2:12:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	3.3	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z

Sample ID: SL-308-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 1:54:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.27	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z
4,4'-DDT	0.25	J	0.067	MDL	0.35	PQL	ug/Kg	J	Z
Chlordane	1.4	J	0.82	MDL	3.5	PQL	ug/Kg	J	Z
DELTA-BHC	0.054	J	0.037	MDL	0.17	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOXAPHENE	2.4	J	2.2	MDL	6.7	PQL	ug/Kg	J	Z

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlordane	2.4	J	0.81	MDL	3.4	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.093	J	0.067	MDL	0.34	PQL	ug/Kg	J	Z

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

Sample ID: SL-238-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:56:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z
Aroclor 5460	2.7	J	1.0	MDL	3.3	PQL	ug/Kg	J	Z

Sample ID: SL-241-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.74	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.77	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-243-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.5	J	0.39	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.5	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8151A **Matrix:** SO

Sample ID: SL-233-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:09:00 *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)	0.085	J	0.076	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.5	J	0.63	MDL	1.7	PQL	ug/Kg	J	Z

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

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 3:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	150	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	91	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	80	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	18	MDL	360	PQL	ug/Kg	J	Z
CHRYSENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	110	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	80	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	110	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-124-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	47	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	31	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1200	U	1200	MDL	3400	PQL	ug/Kg	R	Q
CHRYSENE	24	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	78	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	48	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	63	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-238-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 8:56:00 *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	23	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-242-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-243-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	17	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SL-244-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	19	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	25	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-244-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	21	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-307-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:12:00 *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	150	J	17	MDL	340	PQL	ug/Kg	J	Z
FLUORANTHENE	42	J	17	MDL	170	PQL	ug/Kg	J	Z
PHENANTHRENE	24	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	31	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	17	MDL	340	PQL	ug/Kg	J	Z

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

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 3:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.3	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
PHENANTHRENE	4.4	J	3.6	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *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	8.3	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	6.9	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-124-SA6-SB-12.5-13.5 ***Collected:*** 7/22/2011 11:55:00 ***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(B)FLUORANTHENE	4.3	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	5.9	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
CHRYSENE	4.5	J	1.8	MDL	9.2	PQL	ug/Kg	J	Z
FLUORANTHENE	5.8	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z
PYRENE	5.5	J	3.7	MDL	9.2	PQL	ug/Kg	J	Z

Sample ID: SL-124-SA6-SB-4.0-5.0 ***Collected:*** 7/22/2011 11:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	6.3	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 8:09:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.69	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Diethylphthalate	6.1	U	6.1	MDL	18	PQL	ug/Kg	UJ	Q

Sample ID: SL-238-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 8:56:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-242-SA6-SS-0.0-0.5 ***Collected:*** 7/22/2011 3:27:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	3.4	J	1.7	MDL	8.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-243-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.73	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-244-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 3:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.0	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.79	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-308-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 1:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.86	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.83	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.95	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.0	J	6.1	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-309-SA6-SS-0.0-0.5 *Collected:* 7/22/2011 2:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.50	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.85	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-075-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 3:15:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	270	J	110	MDL	550	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory:** LL

EDD Filename: DE207_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-082-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 10:00:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.6	U	1.6	MDL	3.7	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.6	U	1.6	MDL	3.7	PQL	mg/Kg	UJ	S
p-Terphenyl	1.6	U	1.6	MDL	3.7	PQL	mg/Kg	UJ	S

Sample ID: SL-103-SA6-SB-4.0-5.0 *Collected:* 7/22/2011 8:35:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	280	J	110	MDL	530	PQL	ug/Kg	J	Z

Sample ID: SL-103-SA6-SB-9.0-10.0 *Collected:* 7/22/2011 8:45:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	290	J	110	MDL	550	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

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

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

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

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE207

Method Blank Outlier Report

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA21B261345	8/10/2011 1:45:00 PM	N-NITROSODIMETHYLAMINE	40.2 ng/Kg	SL-233-SA6-SS-0.0-0.5

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P21308BB220258	8/3/2011 2:58:00 AM	ALUMINUM CALCIUM IRON MAGNESIUM PHOSPHORUS STRONTIUM TIN	9.65 mg/Kg 20.3 mg/Kg 4.18 mg/Kg 0.606 mg/Kg 1.24 mg/Kg 0.110 mg/Kg 1.76 mg/Kg	SL-075-SA6-SB-4.0-5.0 SL-075-SA6-SB-9.0-10.0 SL-082-SA6-SB-4.0-5.0 SL-082-SA6-SB-9.0-10.0 SL-103-SA6-SB-4.0-5.0 SL-103-SA6-SB-9.0-10.0 SL-124-SA6-SB-12.5-13.5 SL-124-SA6-SB-4.0-5.0 SL-233-SA6-SS-0.0-0.5 SL-238-SA6-SS-0.0-0.5 SL-241-SA6-SS-0.0-0.5 SL-242-SA6-SS-0.0-0.5 SL-243-SA6-SS-0.0-0.5 SL-244-SA6-SS-0.0-0.5 SL-307-SA6-SS-0.0-0.5 SL-308-SA6-SS-0.0-0.5 SL-309-SA6-SS-0.0-0.5
P21308BB221125	8/3/2011 11:25:00 AM	BORON	1.45 mg/Kg	SL-075-SA6-SB-4.0-5.0 SL-075-SA6-SB-9.0-10.0 SL-082-SA6-SB-4.0-5.0 SL-082-SA6-SB-9.0-10.0 SL-103-SA6-SB-4.0-5.0 SL-103-SA6-SB-9.0-10.0 SL-124-SA6-SB-12.5-13.5 SL-124-SA6-SB-4.0-5.0 SL-233-SA6-SS-0.0-0.5 SL-238-SA6-SS-0.0-0.5 SL-241-SA6-SS-0.0-0.5 SL-242-SA6-SS-0.0-0.5 SL-243-SA6-SS-0.0-0.5 SL-244-SA6-SS-0.0-0.5 SL-307-SA6-SS-0.0-0.5 SL-308-SA6-SS-0.0-0.5 SL-309-SA6-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-075-SA6-SB-4.0-5.0(REA)	BORON	4.06 mg/Kg	4.06U mg/Kg
SL-075-SA6-SB-4.0-5.0(RES)	TIN	2.52 mg/Kg	2.52U mg/Kg
SL-075-SA6-SB-9.0-10.0(REA)	BORON	0.854 mg/Kg	0.854U mg/Kg
SL-075-SA6-SB-9.0-10.0(RES)	TIN	2.38 mg/Kg	2.38U mg/Kg
SL-082-SA6-SB-4.0-5.0(REA)	BORON	1.73 mg/Kg	1.73U mg/Kg
SL-082-SA6-SB-4.0-5.0(RES)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-082-SA6-SB-9.0-10.0(REA)	BORON	1.35 mg/Kg	1.35U mg/Kg
SL-082-SA6-SB-9.0-10.0(RES)	TIN	2.78 mg/Kg	2.78U mg/Kg
SL-103-SA6-SB-4.0-5.0(REA)	BORON	1.46 mg/Kg	1.46U mg/Kg
SL-103-SA6-SB-4.0-5.0(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_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-103-SA6-SB-9.0-10.0(REA)	BORON	1.41 mg/Kg	1.41U mg/Kg
SL-103-SA6-SB-9.0-10.0(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-124-SA6-SB-12.5-13.5(RES)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-124-SA6-SB-4.0-5.0(REA)	BORON	1.56 mg/Kg	1.56U mg/Kg
SL-124-SA6-SB-4.0-5.0(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-233-SA6-SS-0.0-0.5(REA)	BORON	2.63 mg/Kg	2.63U mg/Kg
SL-233-SA6-SS-0.0-0.5(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-238-SA6-SS-0.0-0.5(REA)	BORON	3.32 mg/Kg	3.32U mg/Kg
SL-238-SA6-SS-0.0-0.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-241-SA6-SS-0.0-0.5(REA)	BORON	3.23 mg/Kg	3.23U mg/Kg
SL-241-SA6-SS-0.0-0.5(RES)	TIN	2.07 mg/Kg	2.07U mg/Kg
SL-242-SA6-SS-0.0-0.5(REA)	BORON	5.17 mg/Kg	5.17U mg/Kg
SL-242-SA6-SS-0.0-0.5(RES)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-243-SA6-SS-0.0-0.5(REA)	BORON	3.36 mg/Kg	3.36U mg/Kg
SL-243-SA6-SS-0.0-0.5(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-244-SA6-SS-0.0-0.5(REA)	BORON	3.33 mg/Kg	3.33U mg/Kg
SL-244-SA6-SS-0.0-0.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-307-SA6-SS-0.0-0.5(REA)	BORON	3.22 mg/Kg	3.22U mg/Kg
SL-307-SA6-SS-0.0-0.5(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-308-SA6-SS-0.0-0.5(REA)	BORON	5.97 mg/Kg	5.97U mg/Kg
SL-308-SA6-SS-0.0-0.5(RES)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-309-SA6-SS-0.0-0.5(REA)	BORON	4.10 mg/Kg	4.10U mg/Kg
SL-309-SA6-SS-0.0-0.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15156AB242338A	8/4/2011 11:38:00 PM	2,4,5-T MCPP	0.085 ug/Kg 81 ug/Kg	SL-233-SA6-SS-0.0-0.5 SL-238-SA6-SS-0.0-0.5 SL-241-SA6-SS-0.0-0.5 SL-242-SA6-SS-0.0-0.5 SL-243-SA6-SS-0.0-0.5 SL-244-SA6-SS-0.0-0.5 SL-307-SA6-SS-0.0-0.5 SL-308-SA6-SS-0.0-0.5 SL-309-SA6-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLN21B261133	8/16/2011 11:33:00 AM	Diethylphthalate	74 ug/Kg	SL-075-SA6-SB-4.0-5.0 SL-075-SA6-SB-9.0-10.0 SL-082-SA6-SB-4.0-5.0 SL-082-SA6-SB-9.0-10.0 SL-103-SA6-SB-4.0-5.0 SL-103-SA6-SB-9.0-10.0 SL-124-SA6-SB-12.5-13.5 SL-124-SA6-SB-4.0-5.0 SL-233-SA6-SS-0.0-0.5 SL-238-SA6-SS-0.0-0.5 SL-241-SA6-SS-0.0-0.5 SL-242-SA6-SS-0.0-0.5 SL-243-SA6-SS-0.0-0.5 SL-244-SA6-SS-0.0-0.5 SL-307-SA6-SS-0.0-0.5 SL-308-SA6-SS-0.0-0.5 SL-309-SA6-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-233-SA6-SS-0.0-0.5MS	DIETHYLENE GLYCOL	22	27	59.00-109.00	21 (20.00)	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)
SL-233-SA6-SS-0.0-0.5MSD	ETHYLENE GLYCOL	48	53	63.00-107.00	-	ETHYLENE GLYCOL	
(SL-233-SA6-SS-0.0-0.5)	Propylene glycol	62	-	63.00-107.00	-	Propylene glycol	
SL-233-SA6-SS-0.0-0.5MS	EFH (C15-C20)	146	165	49.00-123.00	-	EFH (C15-C20)	J(all detects) EFH (C30-C40), No Qual, >4x
SL-233-SA6-SS-0.0-0.5MSD	EFH (C30-C40)	276	260	49.00-123.00	-	EFH (C30-C40)	
(SL-233-SA6-SS-0.0-0.5)							

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-233-SA6-SS-0.0-0.5MS	ARSENIC	49	28	75.00-125.00	-	ARSENIC	
SL-233-SA6-SS-0.0-0.5MSD	NICKEL	-604	-604	75.00-125.00	-	NICKEL	
(SL-075-SA6-SB-4.0-5.0	VANADIUM	32	10	75.00-125.00	-	VANADIUM	
SL -075-SA6-SB-9.0-10.0	ZINC	26	-182	75.00-125.00	-	ZINC	
SL -082-SA6-SB-4.0-5.0							
SL -082-SA6-SB-9.0-10.0							
SL -103-SA6-SB-4.0-5.0							
SL -103-SA6-SB-9.0-10.0							J(all detects) R(all non-detects)
SL -124-SA6-SB-12.5-13.5							
SL -124-SA6-SB-4.0-5.0							
SL -233-SA6-SS-0.0-0.5							
SL -238-SA6-SS-0.0-0.5							Ni, Zn, No Qual, >4x
SL -241-SA6-SS-0.0-0.5							
SL -242-SA6-SS-0.0-0.5							
SL -243-SA6-SS-0.0-0.5							
SL -244-SA6-SS-0.0-0.5							As Post Spike = 29% V Post Spike = -1150%
SL -307-SA6-SS-0.0-0.5							
SL -308-SA6-SS-0.0-0.5							
SL -309-SA6-SS-0.0-0.5)							
SL-233-SA6-SS-0.0-0.5MS	ANTIMONY	50	48	75.00-125.00	-	ANTIMONY	
SL-233-SA6-SS-0.0-0.5MSD	CHROMIUM	46	39	75.00-125.00	-	CHROMIUM	
(SL-075-SA6-SB-4.0-5.0	COPPER	64	62	75.00-125.00	-	COPPER	
SL -075-SA6-SB-9.0-10.0	LEAD	70	48	75.00-125.00	-	LEAD	
SL -082-SA6-SB-4.0-5.0	SILVER	67	71	75.00-125.00	-	SILVER	
SL -082-SA6-SB-9.0-10.0							
SL -103-SA6-SB-4.0-5.0							
SL -103-SA6-SB-9.0-10.0							
SL -124-SA6-SB-12.5-13.5							
SL -124-SA6-SB-4.0-5.0							J(all detects) UJ(all non-detects)
SL -233-SA6-SS-0.0-0.5							
SL -238-SA6-SS-0.0-0.5							
SL -241-SA6-SS-0.0-0.5							
SL -242-SA6-SS-0.0-0.5							
SL -243-SA6-SS-0.0-0.5							
SL -244-SA6-SS-0.0-0.5							
SL -307-SA6-SS-0.0-0.5							Pb, No Qual, >4x
SL -308-SA6-SS-0.0-0.5							
SL -309-SA6-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_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-233-SA6-SS-0.0-0.5MS SL-233-SA6-SS-0.0-0.5MSD (SL-075-SA6-SB-4.0-5.0 SL -075-SA6-SB-9.0-10.0 SL -082-SA6-SB-4.0-5.0 SL -082-SA6-SB-9.0-10.0 SL -103-SA6-SB-4.0-5.0 SL -103-SA6-SB-9.0-10.0 SL -124-SA6-SB-12.5-13.5 SL -124-SA6-SB-4.0-5.0 SL -233-SA6-SS-0.0-0.5 SL -238-SA6-SS-0.0-0.5 SL -241-SA6-SS-0.0-0.5 SL -242-SA6-SS-0.0-0.5 SL -243-SA6-SS-0.0-0.5 SL -244-SA6-SS-0.0-0.5 SL -307-SA6-SS-0.0-0.5 SL -308-SA6-SS-0.0-0.5 SL -309-SA6-SS-0.0-0.5)	BARIUM	-124	-120	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-233-SA6-SS-0.0-0.5MS	ALUMINUM	1638	1041	75.00-125.00	-	ALUMINUM	
SL-233-SA6-SS-0.0-0.5MSD	CALCIUM	184	134	75.00-125.00	-	CALCIUM	
(SL-075-SA6-SB-4.0-5.0	MAGNESIUM	334	172	75.00-125.00	-	MAGNESIUM	
SL -075-SA6-SB-9.0-10.0 SL -082-SA6-SB-4.0-5.0 SL -082-SA6-SB-9.0-10.0 SL -103-SA6-SB-4.0-5.0 SL -103-SA6-SB-9.0-10.0 SL -124-SA6-SB-12.5-13.5 SL -124-SA6-SB-4.0-5.0 SL -233-SA6-SS-0.0-0.5 SL -238-SA6-SS-0.0-0.5 SL -241-SA6-SS-0.0-0.5 SL -242-SA6-SS-0.0-0.5 SL -243-SA6-SS-0.0-0.5 SL -244-SA6-SS-0.0-0.5 SL -307-SA6-SS-0.0-0.5 SL -308-SA6-SS-0.0-0.5 SL -309-SA6-SS-0.0-0.5)							No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_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-233-SA6-SS-0.0-0.5MS SL-233-SA6-SS-0.0-0.5MSD (SL-075-SA6-SB-4.0-5.0 SL -075-SA6-SB-9.0-10.0 SL -082-SA6-SB-4.0-5.0 SL -082-SA6-SB-9.0-10.0 SL -103-SA6-SB-4.0-5.0 SL -103-SA6-SB-9.0-10.0 SL -124-SA6-SB-12.5-13.5 SL -124-SA6-SB-4.0-5.0 SL -233-SA6-SS-0.0-0.5 SL -238-SA6-SS-0.0-0.5 SL -241-SA6-SS-0.0-0.5 SL -242-SA6-SS-0.0-0.5 SL -243-SA6-SS-0.0-0.5 SL -244-SA6-SS-0.0-0.5 SL -307-SA6-SS-0.0-0.5 SL -308-SA6-SS-0.0-0.5 SL -309-SA6-SS-0.0-0.5)	IRON	558	-208	75.00-125.00	-	IRON	No Qual, >4x
SL-233-SA6-SS-0.0-0.5MS SL-233-SA6-SS-0.0-0.5MSD (SL-075-SA6-SB-4.0-5.0 SL -075-SA6-SB-9.0-10.0 SL -082-SA6-SB-4.0-5.0 SL -082-SA6-SB-9.0-10.0 SL -103-SA6-SB-4.0-5.0 SL -103-SA6-SB-9.0-10.0 SL -124-SA6-SB-12.5-13.5 SL -124-SA6-SB-4.0-5.0 SL -233-SA6-SS-0.0-0.5 SL -238-SA6-SS-0.0-0.5 SL -241-SA6-SS-0.0-0.5 SL -242-SA6-SS-0.0-0.5 SL -243-SA6-SS-0.0-0.5 SL -244-SA6-SS-0.0-0.5 SL -307-SA6-SS-0.0-0.5 SL -308-SA6-SS-0.0-0.5 SL -309-SA6-SS-0.0-0.5)	MANGANESE PHOSPHORUS	174 -	74 73	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-233-SA6-SS-0.0-0.5MS SL-233-SA6-SS-0.0-0.5MSD (SL-233-SA6-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_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-233-SA6-SS-0.0-0.5MS SL-233-SA6-SS-0.0-0.5MSD (SL-075-SA6-SB-4.0-5.0 SL -075-SA6-SB-9.0-10.0 SL -082-SA6-SB-4.0-5.0 SL -082-SA6-SB-9.0-10.0 SL -103-SA6-SB-4.0-5.0 SL -103-SA6-SB-9.0-10.0 SL -124-SA6-SB-12.5-13.5 SL -124-SA6-SB-4.0-5.0 SL -233-SA6-SS-0.0-0.5 SL -238-SA6-SS-0.0-0.5 SL -241-SA6-SS-0.0-0.5 SL -242-SA6-SS-0.0-0.5 SL -243-SA6-SS-0.0-0.5 SL -244-SA6-SS-0.0-0.5 SL -307-SA6-SS-0.0-0.5 SL -308-SA6-SS-0.0-0.5 SL -309-SA6-SS-0.0-0.5)	TITANIUM	170	153	75.00-125.00	-	TITANIUM	No Qual, >4x

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-233-SA6-SS-0.0-0.5MS SL-233-SA6-SS-0.0-0.5MSD (SL-233-SA6-SS-0.0-0.5)	Di-n-butylphthalate	255	-	65.00-148.00	73 (30.00)	Di-n-butylphthalate	J(all detects)
SL-233-SA6-SS-0.0-0.5MS SL-233-SA6-SS-0.0-0.5MSD (SL-233-SA6-SS-0.0-0.5)	Diethylphthalate	67	66	70.00-136.00	-	Diethylphthalate	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-233-SA6-SS-0.0-0.5DUP	ANTIMONY	76	20.00	
(SL-075-SA6-SB-4.0-5.0	ARSENIC	46	20.00	
SL -075-SA6-SB-9.0-10.0	BARIUM	46	20.00	
SL -082-SA6-SB-4.0-5.0	BERYLLIUM	0.237	0.194 mg/kg	
SL -082-SA6-SB-9.0-10.0	CADMIUM	57	20.00	
SL -103-SA6-SB-4.0-5.0	CHROMIUM	48	20.00	
SL -103-SA6-SB-9.0-10.0	COBALT	44	20.00	
SL -124-SA6-SB-12.5-13.5	COPPER	58	20.00	
SL -124-SA6-SB-4.0-5.0	LEAD	30	20.00	
SL -233-SA6-SS-0.0-0.5	MOLYBDENUM	0.9376	0.194 mg/kg	J (all detects) UJ (all non-detects)
SL -238-SA6-SS-0.0-0.5	NICKEL	154	20.00	
SL -241-SA6-SS-0.0-0.5	SELENIUM	41	20.00	
SL -242-SA6-SS-0.0-0.5	SILVER	5.1993	0.194 mg/kg	
SL -243-SA6-SS-0.0-0.5	THALLIUM	39	20.00	
SL -244-SA6-SS-0.0-0.5	VANADIUM	39	20.00	Sb, Cd, Se, Tl, No Qual, OK by Difference
SL -307-SA6-SS-0.0-0.5	ZINC	38	20.00	
SL -308-SA6-SS-0.0-0.5				
SL -309-SA6-SS-0.0-0.5)				

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-082-SA6-SB-9.0-10.0DUP	FLUORIDE	21	20.00	
(SL-075-SA6-SB-4.0-5.0				
SL -075-SA6-SB-9.0-10.0				
SL -082-SA6-SB-9.0-10.0				No Qual, OK by Difference
SL -103-SA6-SB-4.0-5.0				
SL -103-SA6-SB-9.0-10.0				
SL -124-SA6-SB-12.5-13.5				
SL -124-SA6-SB-4.0-5.0)				

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P21308BQ220302	ALUMINUM	153	-	80.00-120.00	-	ALUMINUM	
(SL-075-SA6-SB-4.0-5.0	IRON	136	-	80.00-120.00	-	IRON	
SL -075-SA6-SB-9.0-10.0	MAGNESIUM	128	-	80.00-120.00	-	MAGNESIUM	
SL -082-SA6-SB-4.0-5.0							
SL -082-SA6-SB-9.0-10.0							
SL -103-SA6-SB-4.0-5.0							
SL -103-SA6-SB-9.0-10.0							
SL -124-SA6-SB-12.5-13.5							
SL -124-SA6-SB-4.0-5.0							
SL -233-SA6-SS-0.0-0.5							No Qual, SRM within QC Limits
SL -238-SA6-SS-0.0-0.5							
SL -241-SA6-SS-0.0-0.5							
SL -242-SA6-SS-0.0-0.5							
SL -243-SA6-SS-0.0-0.5							
SL -244-SA6-SS-0.0-0.5							
SL -307-SA6-SS-0.0-0.5							
SL -308-SA6-SS-0.0-0.5							
SL -309-SA6-SS-0.0-0.5)							
P21508AQ221702	TITANIUM	167	-	80.00-120.00	-	TITANIUM	
(SL-075-SA6-SB-4.0-5.0							
SL -075-SA6-SB-9.0-10.0							
SL -082-SA6-SB-4.0-5.0							
SL -082-SA6-SB-9.0-10.0							
SL -103-SA6-SB-4.0-5.0							
SL -103-SA6-SB-9.0-10.0							
SL -124-SA6-SB-12.5-13.5							
SL -124-SA6-SB-4.0-5.0							
SL -233-SA6-SS-0.0-0.5							No Qual, SRM within QC Limits
SL -238-SA6-SS-0.0-0.5							
SL -241-SA6-SS-0.0-0.5							
SL -242-SA6-SS-0.0-0.5							
SL -243-SA6-SS-0.0-0.5							
SL -244-SA6-SS-0.0-0.5							
SL -307-SA6-SS-0.0-0.5							
SL -308-SA6-SS-0.0-0.5							
SL -309-SA6-SS-0.0-0.5)							

Surrogate Outlier Report

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8015B**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-082-SA6-SB-4.0 -5.0	n-Triacontane-d62	41	50.00-150.00	All Target Analytes	J (all detects) UJ (all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE207 Laboratory: LL

EDD Filename: DE207_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA6-SB-4.0-5.0	BORON	J	4.06	5.41	PQL	mg/Kg	J (all detects)
	TIN	J	2.52	10.8	PQL	mg/Kg	
	Zirconium	J	3.22	5.41	PQL	mg/Kg	
SL-075-SA6-SB-9.0-10.0	BORON	J	0.854	5.35	PQL	mg/Kg	J (all detects)
	TIN	J	2.38	10.7	PQL	mg/Kg	
	Zirconium	J	2.85	5.35	PQL	mg/Kg	
SL-082-SA6-SB-4.0-5.0	BORON	J	1.73	5.20	PQL	mg/Kg	J (all detects)
	TIN	J	2.33	10.4	PQL	mg/Kg	
	Zirconium	J	2.38	5.20	PQL	mg/Kg	
SL-082-SA6-SB-9.0-10.0	BORON	J	1.35	5.30	PQL	mg/Kg	J (all detects)
	TIN	J	2.78	10.6	PQL	mg/Kg	
	Zirconium	J	2.24	5.30	PQL	mg/Kg	
SL-103-SA6-SB-4.0-5.0	BORON	J	1.46	5.24	PQL	mg/Kg	J (all detects)
	TIN	J	2.67	10.5	PQL	mg/Kg	
	Zirconium	J	2.00	5.24	PQL	mg/Kg	
SL-103-SA6-SB-9.0-10.0	BORON	J	1.41	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	2.46	10.9	PQL	mg/Kg	
	Zirconium	J	2.04	5.43	PQL	mg/Kg	
SL-124-SA6-SB-12.5-13.5	TIN	J	2.44	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.79	5.35	PQL	mg/Kg	
SL-124-SA6-SB-4.0-5.0	BORON	J	1.56	5.32	PQL	mg/Kg	J (all detects)
	TIN	J	2.89	10.6	PQL	mg/Kg	
	Zirconium	J	2.56	5.32	PQL	mg/Kg	
SL-233-SA6-SS-0.0-0.5	BORON	J	2.63	4.94	PQL	mg/Kg	J (all detects)
	SODIUM	J	61.1	98.9	PQL	mg/Kg	
	TIN	J	2.45	9.89	PQL	mg/Kg	
	Zirconium	J	2.43	4.94	PQL	mg/Kg	
SL-238-SA6-SS-0.0-0.5	BORON	J	3.32	5.01	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.2	100	PQL	mg/Kg	
	TIN	J	2.89	10.0	PQL	mg/Kg	
	Zirconium	J	2.85	5.01	PQL	mg/Kg	
SL-241-SA6-SS-0.0-0.5	BORON	J	3.23	5.04	PQL	mg/Kg	J (all detects)
	TIN	J	2.07	10.1	PQL	mg/Kg	
SL-242-SA6-SS-0.0-0.5	SODIUM	J	182	490	PQL	mg/Kg	J (all detects)
	TIN	J	3.18	49.0	PQL	mg/Kg	
	Zirconium	J	6.60	24.5	PQL	mg/Kg	
SL-243-SA6-SS-0.0-0.5	BORON	J	3.36	4.94	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.3	98.7	PQL	mg/Kg	
	TIN	J	2.72	9.87	PQL	mg/Kg	
	Zirconium	J	2.90	4.94	PQL	mg/Kg	
SL-244-SA6-SS-0.0-0.5	BORON	J	3.33	4.94	PQL	mg/Kg	J (all detects)
	SODIUM	J	68.2	98.9	PQL	mg/Kg	
	TIN	J	2.79	9.89	PQL	mg/Kg	
	Zirconium	J	2.89	4.94	PQL	mg/Kg	
SL-307-SA6-SS-0.0-0.5	BORON	J	3.22	4.96	PQL	mg/Kg	J (all detects)
	SODIUM	J	69.8	99.2	PQL	mg/Kg	
	TIN	J	2.64	9.92	PQL	mg/Kg	
	Zirconium	J	2.40	4.96	PQL	mg/Kg	
SL-308-SA6-SS-0.0-0.5	SODIUM	J	74.0	101	PQL	mg/Kg	J (all detects)
	TIN	J	2.33	10.1	PQL	mg/Kg	
	Zirconium	J	2.21	5.06	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-309-SA6-SS-0.0-0.5	BORON	J	4.10	4.90	PQL	mg/Kg	J (all detects)
	SODIUM	J	73.1	98.0	PQL	mg/Kg	
	TIN	J	2.79	9.80	PQL	mg/Kg	
	Zirconium	J	2.87	4.90	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA6-SB-4.0-5.0	ANTIMONY	J	0.173	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.164	0.437	PQL	mg/Kg	
	SILVER	J	0.0553	0.109	PQL	mg/Kg	
SL-075-SA6-SB-9.0-10.0	ANTIMONY	J	0.159	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.125	0.419	PQL	mg/Kg	
	SILVER	J	0.0374	0.105	PQL	mg/Kg	
SL-082-SA6-SB-4.0-5.0	ANTIMONY	J	0.132	0.204	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0569	0.102	PQL	mg/Kg	
	SELENIUM	J	0.0885	0.408	PQL	mg/Kg	
	SILVER	J	0.0359	0.102	PQL	mg/Kg	
SL-082-SA6-SB-9.0-10.0	ANTIMONY	J	0.166	0.214	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0890	0.107	PQL	mg/Kg	
	SELENIUM	J	0.0858	0.428	PQL	mg/Kg	
	SILVER	J	0.0232	0.107	PQL	mg/Kg	
SL-103-SA6-SB-4.0-5.0	ANTIMONY	J	0.134	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.135	0.424	PQL	mg/Kg	
	SILVER	J	0.0287	0.106	PQL	mg/Kg	
SL-103-SA6-SB-9.0-10.0	ANTIMONY	J	0.0908	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0789	0.107	PQL	mg/Kg	
	SILVER	J	0.0216	0.107	PQL	mg/Kg	
SL-124-SA6-SB-12.5-13.5	SELENIUM	J	0.108	0.428	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0509	0.107	PQL	mg/Kg	
SL-124-SA6-SB-4.0-5.0	SELENIUM	J	0.124	0.421	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0473	0.105	PQL	mg/Kg	
SL-233-SA6-SS-0.0-0.5	SELENIUM	J	0.160	0.388	PQL	mg/Kg	J (all detects)
SL-238-SA6-SS-0.0-0.5	SELENIUM	J	0.220	0.400	PQL	mg/Kg	J (all detects)
SL-241-SA6-SS-0.0-0.5	SELENIUM	J	0.0812	0.392	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0339	0.0979	PQL	mg/Kg	
SL-242-SA6-SS-0.0-0.5	SELENIUM	J	0.118	0.396	PQL	mg/Kg	J (all detects)
SL-243-SA6-SS-0.0-0.5	SELENIUM	J	0.192	0.399	PQL	mg/Kg	J (all detects)
SL-244-SA6-SS-0.0-0.5	SELENIUM	J	0.149	0.392	PQL	mg/Kg	J (all detects)
SL-307-SA6-SS-0.0-0.5	ANTIMONY	J	0.190	0.195	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.158	0.389	PQL	mg/Kg	
SL-308-SA6-SS-0.0-0.5	SELENIUM	J	0.211	0.401	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0522	0.100	PQL	mg/Kg	
SL-309-SA6-SS-0.0-0.5	SELENIUM	J	0.193	0.388	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA6-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.63	1.1	PQL	mg/Kg	J (all detects)
SL-233-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.61	1.0	PQL	mg/Kg	J (all detects)
SL-238-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.64	1.0	PQL	mg/Kg	J (all detects)
SL-244-SA6-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.67	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA6-SB-9.0-10.0	MERCURY	J	0.0155	0.107	PQL	mg/Kg	J (all detects)
SL-238-SA6-SS-0.0-0.5	MERCURY	J	0.010	0.0964	PQL	mg/Kg	J (all detects)
SL-241-SA6-SS-0.0-0.5	MERCURY	J	0.0346	0.0993	PQL	mg/Kg	J (all detects)
SL-242-SA6-SS-0.0-0.5	MERCURY	J	0.0193	0.0982	PQL	mg/Kg	J (all detects)
SL-243-SA6-SS-0.0-0.5	MERCURY	J	0.0156	0.0987	PQL	mg/Kg	J (all detects)
SL-308-SA6-SS-0.0-0.5	MERCURY	J	0.0090	0.100	PQL	mg/Kg	J (all detects)
SL-309-SA6-SS-0.0-0.5	MERCURY	J	0.0239	0.0983	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA6-SB-9.0-10.0	METHANOL	J	270	550	PQL	ug/Kg	J (all detects)
SL-103-SA6-SB-4.0-5.0	METHANOL	J	280	530	PQL	ug/Kg	J (all detects)
SL-103-SA6-SB-9.0-10.0	METHANOL	J	290	550	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-103-SA6-SB-9.0-10.0	EFH (C21-C30)	J	0.74	1.3	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-233-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.12	0.17	PQL	ug/Kg	J (all detects)
SL-238-SA6-SS-0.0-0.5	4,4'-DDE	J	0.23	0.34	PQL	ug/Kg	J (all detects)
	Chlordane	J	2.1	3.4	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-241-SA6-SS-0.0-0.5	ENDRIN KETONE	J	0.25	0.34	PQL	ug/Kg	J (all detects)
	gamma-BHC (Lindane)	J	0.084	0.17	PQL	ug/Kg	
SL-242-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.096	0.17	PQL	ug/Kg	J (all detects)
SL-244-SA6-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.036	0.17	PQL	ug/Kg	J (all detects)
SL-307-SA6-SS-0.0-0.5	Chlordane	J	3.3	3.4	PQL	ug/Kg	J (all detects)
SL-308-SA6-SS-0.0-0.5	4,4'-DDE	J	0.27	0.35	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.25	0.35	PQL	ug/Kg	
	Chlordane	J	1.4	3.5	PQL	ug/Kg	
	DELTA-BHC	J	0.054	0.17	PQL	ug/Kg	
	TOXAPHENE	J	2.4	6.7	PQL	ug/Kg	
SL-309-SA6-SS-0.0-0.5	Chlordane	J	2.4	3.4	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.093	0.34	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-238-SA6-SS-0.0-0.5	AROCLOR 1260	J	1.2	1.7	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.7	3.3	PQL	ug/Kg	
SL-241-SA6-SS-0.0-0.5	AROCLOR 1254	J	0.74	1.7	PQL	ug/Kg	J (all detects)
SL-242-SA6-SS-0.0-0.5	AROCLOR 1260	J	0.77	1.7	PQL	ug/Kg	J (all detects)
SL-243-SA6-SS-0.0-0.5	AROCLOR 1260	J	1.5	1.7	PQL	ug/Kg	J (all detects)
SL-308-SA6-SS-0.0-0.5	Aroclor 5460	J	1.5	3.4	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-233-SA6-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.085	0.17	PQL	ug/Kg	J (all detects)
SL-308-SA6-SS-0.0-0.5	2,4-DB	J	1.5	1.7	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA6-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	130	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	130	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	150	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	91	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	80	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	360	PQL	ug/Kg	
	CHRYSENE	J	130	180	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	24	180	PQL	ug/Kg	
	FLUORANTHENE	J	110	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	80	180	PQL	ug/Kg	
	PYRENE	J	110	180	PQL	ug/Kg	
SL-124-SA6-SB-4.0-5.0	BENZO(A)PYRENE	J	47	180	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	33	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	31	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	25	180	PQL	ug/Kg	
SL-233-SA6-SS-0.0-0.5	CHRYSENE	J	24	170	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	78	170	PQL	ug/Kg	
	PHENANTHRENE	J	48	170	PQL	ug/Kg	
	PYRENE	J	63	170	PQL	ug/Kg	
SL-238-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	340	PQL	ug/Kg	J (all detects)
SL-242-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	340	PQL	ug/Kg	J (all detects)
SL-243-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	340	PQL	ug/Kg	J (all detects)
SL-244-SA6-SS-0.0-0.5	BENZO(A)PYRENE	J	19	170	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	25	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	20	170	PQL	ug/Kg	
	CHRYSENE	J	18	170	PQL	ug/Kg	
	FLUORANTHENE	J	18	170	PQL	ug/Kg	
	PYRENE	J	21	170	PQL	ug/Kg	
SL-307-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	150	340	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	42	170	PQL	ug/Kg	
	PHENANTHRENE	J	24	170	PQL	ug/Kg	
	PYRENE	J	31	170	PQL	ug/Kg	
SL-309-SA6-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	340	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA6-SB-9.0-10.0	ANTHRACENE	J	2.3	9.1	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	4.4	9.1	PQL	ug/Kg	
SL-082-SA6-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	8.3	8.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	4.3	8.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	6.9	8.8	PQL	ug/Kg	
SL-124-SA6-SB-12.5-13.5	BENZO(B)FLUORANTHENE	J	4.3	9.2	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	5.9	9.2	PQL	ug/Kg	
	CHRYSENE	J	4.5	9.2	PQL	ug/Kg	
	FLUORANTHENE	J	5.8	9.2	PQL	ug/Kg	
	PYRENE	J	5.5	9.2	PQL	ug/Kg	
SL-124-SA6-SB-4.0-5.0	DIBENZO(A,H)ANTHRACENE	J	6.3	9.0	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE207 **Laboratory: LL**

EDD Filename: DE207_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-233-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.69	1.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	18	PQL	ug/Kg	
SL-238-SA6-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.7	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.4	1.7	PQL	ug/Kg	
SL-242-SA6-SS-0.0-0.5	CHRYSENE	J	3.4	8.4	PQL	ug/Kg	J (all detects)
SL-243-SA6-SS-0.0-0.5	ANTHRACENE	J	0.73	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.7	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.7	PQL	ug/Kg	
SL-244-SA6-SS-0.0-0.5	ACENAPHTHYLENE	J	1.0	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.79	1.7	PQL	ug/Kg	
SL-308-SA6-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.86	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.83	1.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.95	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.0	18	PQL	ug/Kg	
SL-309-SA6-SS-0.0-0.5	ANTHRACENE	J	0.50	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.85	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	

LDC #: 26407G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-21-11
SDG #: DE207 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: AR
2nd Reviewer: MG

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

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

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

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

Validated Samples:

1	SL-233-SA6-SS-0.0-0.5	11	SL-082-SA6-SB-9.0-10.0	21		31	
2	SL-238-SA6-SS-0.0-0.5	12	SL-103-SA6-SB-4.0-5.0	22		32	
3	SL-241-SA6-SS-0.0-0.5	13	SL-103-SA6-SB-9.0-10.0	23		33	
4	SL-242-SA6-SS-0.0-0.5	14	SL-124-SA6-SB-4.0-5.0	24		34	
5	SL-243-SA6-SS-0.0-0.5	15	SL-124-SA6-SB-12.5-13.5	25		35	
6	SL-244-SA6-SS-0.0-0.5	16	SL-075-SA6-SB-4.0-5.0	26		36	
7	SL-307-SA6-SS-0.0-0.5	17	SL-075-SA6-SB-9.0-10.0	27		37	
8	SL-308-SA6-SS-0.0-0.5	18	MS	28		38	
9	SL-309-SA6-SS-0.0-0.5	19	MSD	29		39	
10	SL-082-SA6-SB-4.0-5.0	20	Dup	30		40	

Notes: _____

LDC #: 26407G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: MG

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS:2xdil
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 1-12

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	5	6	7	8	9	10	11	12				
Zr	7.5	3.75	2.4	2.8	2.9	2.9	2.4	2.2	2.9	2.4	2.2	2.0				

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE207
Matrix: SOIL Level (low/med): LOW

74X

Background Lab Sample ID: 6354150BKG Matrix Spike Lab Sample ID: 6354150MS Matrix Spike Duplicate Lab Sample ID: 6354150MSD
% Solids for Sample: 99.2
Batch Id(s): P21308B, P21326A, P21311B, P21508A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	RPD	M
Aluminum -		10977.5459		14247.2942		13055.5943		199.6167	199.6167	MG/KG	1638		1041		9			20	P
Antimony	121	0.3650		0.9606		0.9339		1.1860	1.1744	MG/KG	50	N	48	N	3		75 - 125	20	MS
Arsenic	75	5.8933		6.8608		6.4497		1.9766	1.9574	MG/KG	49	N	28	N	6		75 - 125	20	MS
Barium -	137	106.6804		94.4220		94.9734		9.8830	9.7870	MG/KG	-124		-120		1			20	MS
Beryllium	9	0.6752		1.5332		1.5274		0.7906	0.7830	MG/KG	109		109		0		75 - 125	20	MS
Boron		2.6279	B	202.8385		198.8772		199.6167	199.6167	MG/KG	100		98		2		84 - 115	20	P
Cadmium	111	0.4154		1.4761		1.4563		0.9883	0.9787	MG/KG	107		106		1		75 - 125	20	MS
Calcium -		1934.3345		2667.0123		2471.2103		399.2335	399.2335	MG/KG	184		134		8			20	P
Chromium	52	22.5458		27.1387		26.3467		9.8830	9.7870	MG/KG	46	N	39	N	3		75 - 125	20	MS
Cobalt	59	6.7036		60.5432		60.9732		49.4149	48.9352	MG/KG	109		111		1		75 - 125	20	MS
Copper	63	14.5375		20.8729		20.6506		9.8830	9.7870	MG/KG	64	N	62	N	1		75 - 125	20	MS
Iron -		15369.4576		15926.1059		15162.2066		99.8084	99.8084	MG/KG	558		-208		5			20	P
Lead -	208	12.5582		14.6189		13.9661		2.9649	2.9361	MG/KG	70		48		5			20	MS
Lithium		17.7400		119.9237		116.9075		99.8084	99.8084	MG/KG	102		99		3		82 - 114	20	P
Magnesium -		3228.2515		3895.8001		3572.4219		199.6167	199.6167	MG/KG	334		172		9			20	P
Manganese -		236.2538		322.8501		273.1765		49.9042	49.9042	MG/KG	174		74		17			20	P
Mercury		0.0070	U	0.1646		0.1673		0.1598	0.1609	MG/KG	103		104		2		65 - 135	20	CV
Molybdenum	98	1.3314		12.1897		12.7642		9.8830	9.7870	MG/KG	110		117		5		75 - 125	20	MS
Nickel -	60	84.4448		24.7668		25.2897		9.8830	9.7870	MG/KG	-604		-604		2			20	MS
Phosphorus		345.0190		444.9048		418.1921		99.8084	99.8084	MG/KG	100		73	N	6		75 - 125	20	P
Potassium		2589.6169		3819.3459		3745.8420		998.0837	998.0837	MG/KG	123		116		2		75 - 125	20	P
Selenium	78	0.1596	B	2.5043		2.4448		1.9766	1.9574	MG/KG	119		117		2		75 - 125	20	MS
Silver	107	5.3815		12.0395		12.3277		9.8830	9.7870	MG/KG	67	N	71	N	2		75 - 125	20	MS
Sodium		61.0680	B	1039.6519		1021.1504		998.0837	998.0837	MG/KG	98		96		2		75 - 125	20	P
Strontium		13.2600		112.4401		110.7294		99.8084	99.8084	MG/KG	99		98		2		75 - 115	20	P
Thallium	203	0.2801		0.6699		0.6638		0.3953	0.3915	MG/KG	99		98		1		75 - 125	20	MS
Tin		2.4510	B	352.1768		352.3096		399.2335	399.2335	MG/KG	88		88		0		80 - 110	20	P
Titanium -		833.8931		1002.3660		984.9047		98.8299	98.8299	MG/KG	170		153		2			20	P
Vanadium	51	37.8800		41.0342		38.8350		9.8830	9.7870	MG/KG	32	N	10	N	6		75 - 125	20	MS
Zinc -	66	134.2858		136.8991		116.4461		9.8830	9.7870	MG/KG	26		-182		16			20	MS
Zirconium		2.4243	B	96.8431		96.0256		99.8084	99.8084	MG/KG	95		94		1		75 - 125	20	P

DE207 22-JUN-06

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

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

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE207
Matrix: SOIL Level (low/med): LOW

<5X

Background Lab Sample ID: 6354150BKG
% Solids for Duplicate: 99.2
Batch ID(s): P21308B, P21326A, P21311B, P21508A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6354150DUP
% Solids for Sample: 99.2

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			10977.5459		10917.5453		1		P
Antimony	121	0.2	0.3650		0.1649	B	76	*	MS
Arsenic	75		5.8933		3.6909		46	*	MS
Barium	137		106.6804		66.5522		46	*	MS
* Beryllium	9	0.1	0.6752		0.4382		43	*	MS
Boron			2.6279	B	2.5330	B	4		P
Cadmium	111	0.1	0.4154		0.2320		57	*	MS
Calcium			1934.3345		1850.5969		4		P
Chromium	52		22.5458		13.7915		48	*	MS
Cobalt	59		6.7036		4.3037		44	*	MS
Copper	63		14.5375		8.0226		58	*	MS
Iron			15369.4576		14722.9542		4		P
Lead	208		12.5582		9.2922		30	*	MS
Lithium			17.7400		18.2727		3		P
Magnesium			3228.2515		3229.7547		0		P
Manganese			236.2538		274.6482		15		P
Mercury			0.0070	U	0.0070	U			CV
* Molybdenum	98	0.1	1.3314		0.3938		109	*	MS
Nickel	60		84.4448		11.0408		154	*	MS
Phosphorus			345.0190		317.4247		8		P
Potassium			2589.6169		2581.6246		0		P
Selenium	78		0.1596	B	0.1048	B	41		MS
* Silver	107	0.1	5.3815		0.1822		187	*	MS
Sodium			61.0680	B	60.0125	B	2		P
Strontium			13.2600		13.1068		1		P
Thallium	203	0.1	0.2801		0.1887		39		MS
Tin			2.4510	B	2.2938	B	7		P
Titanium			833.8931		862.5260		3		P
Vanadium	51		37.8800		25.3912		39	*	MS
Zinc	66		134.2858		91.0652		38	*	MS
Zirconium			2.4243	B	2.5034	B	3		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

* Out by difference: Be 0.237 (≤0.194)
Mo 0.9376 (≤0.194)
Ag 5.1993 (≤0.194)
} J/UJ

DE207 4254

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE207
Matrix: SOIL Level (low/med): LOW

5105

Background Lab Sample ID: 6354150BKG Serial Dilution Lab Sample ID: 6354150L
Batch ID(s): P21308B, P21326A, P21508A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		111075.2000		107958.5000		3		P
Antimony	121	1.8830		1.8500	U	100		MS
Arsenic	75	30.4000		24.3400		20		MS
Barium	137	550.3000		428.5000		22	E	MS
Beryllium	9	3.4830		2.7670		21		MS
Boron		26.5900	B	43.5500	B	64		P
Cadmium	111	2.1430		1.9695	B	8		MS
Calcium		19572.3700		20421.1000		4		P
Chromium	52	116.3000		101.4000		13	E	MS
Cobalt	59	34.5800		28.9300		16	E	MS
Copper	63	74.9900		61.5500		18	E	MS
Iron		155514.3200		163489.1500		5		P
Lead	208	64.7800		53.7000		17	E	MS
Lithium		179.5000		180.8500		1		P
Magnesium		32664.7400		33878.2500		4		P
Manganese		2390.5100		2494.1000		4		P
Molybdenum	98	6.8680		5.4250		21		MS
Nickel	60	435.6000		361.1000		17	E	MS
Phosphorus		3491.0400		3512.2000		1		P
Potassium		26202.7800		26232.1000		0		P
Selenium	78	0.8233	B	1.4500	U	100		MS
Silver	107	27.7600		23.0650		17	E	MS
Sodium		617.9100	B	503.4500	B	19		P
Strontium		134.1700		136.3000		2		P
Thallium	203	1.4450		1.2130	B	16		MS
Tin		24.8000	B	18.8500	B	24		P
Titanium		8272.2200		8706.8500		5		P
Vanadium	51	195.4000		169.6000		13	E	MS
Zinc	66	692.7000		588.0000		15	E	MS
Zirconium		24.5300	B	53.5000	B	118		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: DE267 4256
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE208

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	3050B	6010B	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	3050B	6020	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	3060A	7199	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	3550B	8081A	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	3550B	8082	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	3550B	8151A	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	3550B	8270C	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	3550B	8270C SIM	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	METHOD	300.0	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	METHOD	314.0	IV
25-Jul-2011	SL-236-SA6-SS-0.0-0.5	6355051	N	METHOD	7471A	IV
25-Jul-2011	TB-072511	6355064	TB	5030B	8015M	IV
25-Jul-2011	TB-072511	6355064	TB	5030B	8260B	IV
25-Jul-2011	TB-072511	6355064	TB	5030B	8260B SIM	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	3050B	6010B	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	3050B	6020	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	3060A	7199	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	3550B	8081A	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	3550B	8082	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	3550B	8151A	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	3550B	8270C	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	3550B	8270C SIM	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	METHOD	300.0	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	METHOD	314.0	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	METHOD	6850	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5	6355050	N	METHOD	7471A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Jul-2011	SL-235-SA6-SS-0.0-0.5MSD	P355050M241414A	MSD	METHOD	6850	IV
25-Jul-2011	SL-235-SA6-SS-0.0-0.5MS	P355050R241408A	MS	METHOD	6850	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	3050B	6010B	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	3050B	6020	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	3060A	7199	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	3550B	8015B	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	3550B	8015M	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	3550B	8082	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	3550B	8270C	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	3550B	8270C SIM	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	5035	8015M	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	METHOD	300.0	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	METHOD	314.0	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	METHOD	6850	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	METHOD	7471A	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	METHOD	8015B	IV
25-Jul-2011	SL-289-SA6-SB-3.5-4.5	6355062	N	METHOD	8015M	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3050B	6010B	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3050B	6020	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3060A	7199	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3546	1625C	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3550B	8015B	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3550B	8015M	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3550B	8081A	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3550B	8082	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	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
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3550B	8270C	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	3550B	8270C SIM	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	8330	8330A	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	METHOD	300.0	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	METHOD	314.0	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	METHOD	7471A	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	METHOD	8015B	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	METHOD	8015M	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	METHOD	8315A	IV
25-Jul-2011	SL-255-SA6-SS-0.0-0.5	6355055	N	METHOD	9012B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	3050B	6010B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	3050B	6020	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	3060A	7199	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	3550B	8015B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	3550B	8015M	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	3550B	8082	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	3550B	8270C	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	3550B	8270C SIM	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	5035	8015M	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	5035	8260B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	5035	8260B SIM	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	METHOD	300.0	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	METHOD	314.0	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	METHOD	7471A	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	METHOD	8015B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0	6355058	N	METHOD	8015M	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
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	3050B	6010B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	3050B	6020	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	3060A	7199	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	3550B	8015B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	3550B	8015M	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	3550B	8082	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	3550B	8270C	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	3550B	8270C SIM	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	5035	8015M	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	5035	8260B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	5035	8260B SIM	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	METHOD	300.0	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	METHOD	314.0	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	METHOD	7471A	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	METHOD	8015B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	6355059	MS	METHOD	8015M	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	3050B	6010B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	3050B	6020	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	3550B	8015B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	3550B	8015M	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	3550B	8082	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	3550B	8270C	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	3550B	8270C SIM	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	5035	8015M	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	5035	8260B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	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
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	METHOD	7471A	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	METHOD	8015B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MSD	6355060	MSD	METHOD	8015M	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0DUP	6355061	DUP	3050B	6010B	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0DUP	6355061	DUP	3050B	6020	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0DUP	6355061	DUP	3060A	7199	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0DUP	6355061	DUP	METHOD	300.0	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0DUP	6355061	DUP	METHOD	314.0	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0DUP	6355061	DUP	METHOD	7471A	IV
25-Jul-2011	SL-098-SA6-SB-2.0-3.0MS	P355058R211539B	MS	5035	8260B SIM	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	3050B	6010B	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	3050B	6020	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	3060A	7199	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	3550B	8015B	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	3550B	8015M	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	3550B	8082	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	3550B	8270C	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	3550B	8270C SIM	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	5035	8015M	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	5035	8260B	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	5035	8260B SIM	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	METHOD	300.0	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	METHOD	314.0	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	METHOD	6850	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	METHOD	7471A	IV
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	METHOD	8015B	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
25-Jul-2011	DUP07-SA6-QC-072511	6355063	FD	METHOD	8015M	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3050B	6010B	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3050B	6020	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3060A	7199	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3546	1625C	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3550B	8015B	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3550B	8015M	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3550B	8081A	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3550B	8082	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3550B	8151A	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3550B	8270C	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	3550B	8270C SIM	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	8330	8330A	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	METHOD	300.0	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	METHOD	314.0	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	METHOD	6850	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	METHOD	7471A	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	METHOD	8015B	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	METHOD	8015M	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	METHOD	8315A	IV
25-Jul-2011	SL-256-SA6-SS-0.0-0.5	6355056	N	METHOD	9012B	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3050B	6010B	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3050B	6020	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3060A	7199	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3546	1625C	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3550B	8015B	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
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3550B	8015M	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3550B	8081A	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3550B	8082	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3550B	8151A	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3550B	8270C	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	3550B	8270C SIM	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	8330	8330A	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	METHOD	300.0	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	METHOD	314.0	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	METHOD	7471A	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	METHOD	8015B	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	METHOD	8015M	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	METHOD	8315A	IV
25-Jul-2011	SL-193-SA6-SS-0.0-0.5	6355049	N	METHOD	9012B	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3050B	6010B	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3050B	6020	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3060A	7199	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3546	1625C	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3550B	8015B	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3550B	8015M	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3550B	8081A	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3550B	8082	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3550B	8151A	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3550B	8270C	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	3550B	8270C SIM	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	8330	8330A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	METHOD	300.0	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	METHOD	314.0	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	METHOD	7471A	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	METHOD	8015B	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	METHOD	8015M	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	METHOD	8315A	IV
25-Jul-2011	SL-245-SA6-SS-0.0-0.5	6355052	N	METHOD	9012B	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3050B	6010B	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3050B	6020	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3060A	7199	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3546	1625C	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3550B	8015B	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3550B	8015M	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3550B	8081A	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3550B	8082	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3550B	8151A	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3550B	8270C	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	3550B	8270C SIM	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	8330	8330A	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	METHOD	300.0	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	METHOD	314.0	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	METHOD	7471A	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	METHOD	8015B	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	METHOD	8015M	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	METHOD	8315A	IV
25-Jul-2011	SL-254-SA6-SS-0.0-0.5	6355054	N	METHOD	9012B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3050B	6010B	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3050B	6020	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3060A	7199	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3546	1625C	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3550B	8015B	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3550B	8015M	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3550B	8081A	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3550B	8082	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3550B	8151A	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3550B	8270C	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	3550B	8270C SIM	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	8330	8330A	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	METHOD	300.0	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	METHOD	314.0	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	METHOD	7471A	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	METHOD	8015B	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	METHOD	8015M	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	METHOD	8315A	IV
25-Jul-2011	SL-253-SA6-SS-0.0-0.5	6355053	N	METHOD	9012B	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3050B	6010B	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3050B	6020	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3060A	7199	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3546	1625C	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3550B	8015B	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3550B	8015M	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	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
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3550B	8082	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3550B	8151A	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3550B	8270C	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	3550B	8270C SIM	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	8330	8330A	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	Gen Prep	314.0	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	METHOD	300.0	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	METHOD	7471A	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	METHOD	8015B	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	METHOD	8015M	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	METHOD	8315A	IV
25-Jul-2011	SL-268-SA6-SS-0.0-0.5	6355057	N	METHOD	9012B	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3050B	6010B	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3050B	6020	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3060A	7199	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3546	1625C	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3550B	8015B	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3550B	8015M	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3550B	8081A	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3550B	8082	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3550B	8151A	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3550B	8270C	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	3550B	8270C SIM	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	8330	8330A	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	METHOD	300.0	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	METHOD	314.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	METHOD	7471A	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	METHOD	8015B	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	METHOD	8015M	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	METHOD	8315A	IV
25-Jul-2011	SL-192-SA6-SS-0.0-0.5	6355048	N	METHOD	9012B	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3050B	6010B	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3050B	6020	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3060A	7199	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3546	1625C	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3550B	8015B	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3550B	8015M	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3550B	8081A	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3550B	8082	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3550B	8151A	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3550B	8270C	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	3550B	8270C SIM	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	8330	8330A	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	METHOD	300.0	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	METHOD	314.0	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	METHOD	7471A	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	METHOD	8015B	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	METHOD	8015M	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	METHOD	8315A	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5	6355047	N	METHOD	9012B	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5DUP	P355047D270814A	DUP	METHOD	9012B	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5DUP	P355047D270915A	DUP	METHOD	314.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Jul-2011	SL-190-SA6-SS-0.0-0.5DUP	P355047D272045A	DUP	METHOD	300.0	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5MSD	P355047M240408A	MSD	METHOD	8315A	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5MS	P355047R240358A	MS	METHOD	8315A	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5MS	P355047R270815A	MS	METHOD	9012B	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5MS	P355047R270938A	MS	METHOD	314.0	IV
25-Jul-2011	SL-190-SA6-SS-0.0-0.5MS	P355047R272059A	MS	METHOD	300.0	IV

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-190-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 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
FLUORIDE	1.2		0.82	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.82	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-192-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 3:23:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.79	MDL	0.99	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.79	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-193-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 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	2.7		0.83	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	0.88	J	0.83	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-235-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1		0.83	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-236-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 7:52:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.1		0.81	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-245-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 11:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.82	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.82	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-253-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 2:21:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.82	MDL	1.0	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-254-SA6-SS-0.0-0.5 *Collected:* 7/25/2011 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.82	MDL	1.0	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.82	MDL	1.5	PQL	mg/Kg	J	Z

Sample ID: SL-255-SA6-SS-0.0-0.5 *Collected:* 7/25/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.9		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-256-SA6-SS-0.0-0.5 *Collected:* 7/25/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-268-SA6-SS-0.0-0.5 *Collected:* 7/25/2011 2:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.7		0.81	MDL	1.5	PQL	mg/Kg	J	E

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP07-SA6-QC-072511 *Collected:* 7/25/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12400		6.26	MDL	20.7	PQL	mg/Kg	J	A
CALCIUM	5040		2.58	MDL	20.7	PQL	mg/Kg	J	E
TIN	2.35	J	0.331	MDL	10.3	PQL	mg/Kg	UJ	B, FD
Zirconium	2.01	J	0.476	MDL	5.17	PQL	mg/Kg	U	B

Sample ID: SL-098-SA6-SB-2.0-3.0 *Collected:* 7/25/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12600		6.33	MDL	20.9	PQL	mg/Kg	J	A
CALCIUM	7920		2.62	MDL	20.9	PQL	mg/Kg	J	E
TIN	0.489	J	0.335	MDL	10.5	PQL	mg/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-098-SA6-SB-2.0-3.0 ***Collected:*** 7/25/2011 9:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.16	J	0.481	MDL	5.23	PQL	mg/Kg	U	B

Sample ID: SL-190-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 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
ALUMINUM	12600		6.02	MDL	19.9	PQL	mg/Kg	J	A
BORON	2.85	J	0.358	MDL	4.97	PQL	mg/Kg	U	B
CALCIUM	3500		2.49	MDL	19.9	PQL	mg/Kg	J	E
SODIUM	67.9	J	5.92	MDL	99.4	PQL	mg/Kg	J	Z
TIN	2.57	J	0.318	MDL	9.94	PQL	mg/Kg	U	B
Zirconium	1.83	J	0.457	MDL	4.97	PQL	mg/Kg	U	B

Sample ID: SL-192-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 3:23:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12400		5.94	MDL	19.6	PQL	mg/Kg	J	A
BORON	1.81	J	0.353	MDL	4.91	PQL	mg/Kg	U	B
CALCIUM	1810		2.45	MDL	19.6	PQL	mg/Kg	J	E
SODIUM	61.8	J	5.84	MDL	98.2	PQL	mg/Kg	J	Z
TIN	2.24	J	0.314	MDL	9.82	PQL	mg/Kg	U	B
Zirconium	1.54	J	0.452	MDL	4.91	PQL	mg/Kg	U	B

Sample ID: SL-193-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 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
ALUMINUM	14700		6.13	MDL	20.3	PQL	mg/Kg	J	A
BORON	1.32	J	0.365	MDL	5.07	PQL	mg/Kg	U	B
CALCIUM	2700		2.53	MDL	20.3	PQL	mg/Kg	J	E
SODIUM	68.7	J	6.03	MDL	101	PQL	mg/Kg	J	Z
TIN	2.24	J	0.324	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.39	J	0.466	MDL	5.07	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-235-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 8:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15100		5.90	MDL	19.5	PQL	mg/Kg	J	A
BORON	1.20	J	0.351	MDL	4.88	PQL	mg/Kg	U	B
CALCIUM	2620		2.44	MDL	19.5	PQL	mg/Kg	J	E
SODIUM	72.1	J	5.80	MDL	97.5	PQL	mg/Kg	J	Z
TIN	2.22	J	0.312	MDL	9.75	PQL	mg/Kg	U	B
Zirconium	2.03	J	0.449	MDL	4.88	PQL	mg/Kg	U	B

Sample ID: **SL-236-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 7:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14300		5.93	MDL	19.6	PQL	mg/Kg	J	A
BORON	0.974	J	0.353	MDL	4.90	PQL	mg/Kg	U	B
CALCIUM	3020		2.45	MDL	19.6	PQL	mg/Kg	J	E
SODIUM	72.7	J	5.84	MDL	98.1	PQL	mg/Kg	J	Z
TIN	2.36	J	0.314	MDL	9.81	PQL	mg/Kg	U	B
Zirconium	2.59	J	0.451	MDL	4.90	PQL	mg/Kg	U	B

Sample ID: **SL-245-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 11:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15500		5.87	MDL	19.4	PQL	mg/Kg	J	A
BORON	0.981	J	0.350	MDL	4.86	PQL	mg/Kg	U	B
CALCIUM	1910		2.43	MDL	19.4	PQL	mg/Kg	J	E
SODIUM	85.5	J	5.78	MDL	97.1	PQL	mg/Kg	J	Z
TIN	2.21	J	0.311	MDL	9.71	PQL	mg/Kg	U	B
Zirconium	2.51	J	0.447	MDL	4.86	PQL	mg/Kg	U	B

Sample ID: **SL-253-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 2:21:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15600		5.86	MDL	19.4	PQL	mg/Kg	J	A
BORON	1.16	J	0.349	MDL	4.85	PQL	mg/Kg	U	B
CALCIUM	1970		2.42	MDL	19.4	PQL	mg/Kg	J	E
SODIUM	86.7	J	5.77	MDL	96.9	PQL	mg/Kg	J	Z
TIN	2.47	J	0.310	MDL	9.69	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-253-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 2:21:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.32	J	0.446	MDL	4.85	PQL	mg/Kg	U	B

Sample ID: **SL-254-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 1:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15500		5.98	MDL	19.8	PQL	mg/Kg	J	A
BORON	0.856	J	0.356	MDL	4.94	PQL	mg/Kg	U	B
CALCIUM	2180		2.47	MDL	19.8	PQL	mg/Kg	J	E
SODIUM	69.5	J	5.88	MDL	98.8	PQL	mg/Kg	J	Z
TIN	3.31	J	0.316	MDL	9.88	PQL	mg/Kg	U	B
Zirconium	2.45	J	0.454	MDL	4.94	PQL	mg/Kg	U	B

Sample ID: **SL-255-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 9:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13900		5.88	MDL	19.4	PQL	mg/Kg	J	A
BORON	0.931	J	0.350	MDL	4.86	PQL	mg/Kg	U	B
CALCIUM	1590		2.43	MDL	19.4	PQL	mg/Kg	J	E
TIN	2.24	J	0.311	MDL	9.72	PQL	mg/Kg	U	B
Zirconium	1.76	J	0.447	MDL	4.86	PQL	mg/Kg	U	B

Sample ID: **SL-256-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 10:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15300		6.06	MDL	20.0	PQL	mg/Kg	J	A
BORON	1.87	J	0.360	MDL	5.01	PQL	mg/Kg	U	B
CALCIUM	2960		2.50	MDL	20.0	PQL	mg/Kg	J	E
SODIUM	79.0	J	5.96	MDL	100	PQL	mg/Kg	J	Z
TIN	2.40	J	0.320	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	2.49	J	0.461	MDL	5.01	PQL	mg/Kg	U	B

Sample ID: **SL-268-SA6-SS-0.0-0.5** ***Collected:*** **7/25/2011 2:53:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13100		5.87	MDL	19.4	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-268-SA6-SS-0.0-0.5 *Collected:* 7/25/2011 2:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.762	J	0.349	MDL	4.85	PQL	mg/Kg	U	B
CALCIUM	2440		2.42	MDL	19.4	PQL	mg/Kg	J	E
SODIUM	61.1	J	5.77	MDL	97.0	PQL	mg/Kg	J	Z
TIN	1.13	J	0.310	MDL	9.70	PQL	mg/Kg	U	B
Zirconium	1.54	J	0.446	MDL	4.85	PQL	mg/Kg	U	B

Sample ID: SL-289-SA6-SB-3.5-4.5 *Collected:* 7/25/2011 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
ALUMINUM	14700		6.38	MDL	21.1	PQL	mg/Kg	J	A
BORON	1.45	J	0.379	MDL	5.27	PQL	mg/Kg	U	B
CALCIUM	10200		2.63	MDL	21.1	PQL	mg/Kg	J	E
TIN	2.19	J	0.337	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.30	J	0.485	MDL	5.27	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP07-SA6-QC-072511 *Collected:* 7/25/2011 10:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.107	J	0.0600	MDL	0.414	PQL	mg/Kg	J	Z, Q

Sample ID: DUP07-SA6-QC-072511 *Collected:* 7/25/2011 10:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.35		0.0517	MDL	0.103	PQL	mg/Kg	J	Q, FD

Sample ID: DUP07-SA6-QC-072511 *Collected:* 7/25/2011 10:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0765	MDL	0.207	PQL	mg/Kg	J	Z, Q, Q
ARSENIC	6.88		0.0827	MDL	0.414	PQL	mg/Kg	J	Q
BERYLLIUM	0.784		0.0165	MDL	0.103	PQL	mg/Kg	J	Q
CADMIUM	0.141		0.0455	MDL	0.103	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP07-SA6-QC-072511** ***Collected:*** **7/25/2011 10:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	29.8		0.124	MDL	0.414	PQL	mg/Kg	J	Q
COBALT	9.68		0.0207	MDL	0.103	PQL	mg/Kg	J	E
COPPER	12.7		0.0827	MDL	0.414	PQL	mg/Kg	J	Q
LEAD	6.36		0.0105	MDL	0.207	PQL	mg/Kg	J	Q
NICKEL	19.1		0.103	MDL	0.414	PQL	mg/Kg	J	Q
SILVER	0.0319	J	0.0147	MDL	0.103	PQL	mg/Kg	J	Z, Q
THALLIUM	0.388		0.0310	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	52.3		0.0227	MDL	0.103	PQL	mg/Kg	J	Q, A

Sample ID: **SL-098-SA6-SB-2.0-3.0** ***Collected:*** **7/25/2011 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	0.158	J	0.0590	MDL	0.407	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-098-SA6-SB-2.0-3.0** ***Collected:*** **7/25/2011 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	0.684		0.0508	MDL	0.102	PQL	mg/Kg	J	Q, FD

Sample ID: **SL-098-SA6-SB-2.0-3.0** ***Collected:*** **7/25/2011 9:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.170	J	0.0752	MDL	0.203	PQL	mg/Kg	J	Z, Q, Q
ARSENIC	5.12		0.0813	MDL	0.407	PQL	mg/Kg	J	Q
BERYLLIUM	0.533		0.0163	MDL	0.102	PQL	mg/Kg	J	Q
CADMIUM	0.196		0.0447	MDL	0.102	PQL	mg/Kg	J	Q, E
CHROMIUM	20.4		0.122	MDL	0.407	PQL	mg/Kg	J	Q
COBALT	6.76		0.0203	MDL	0.102	PQL	mg/Kg	J	E
COPPER	11.1		0.0813	MDL	0.407	PQL	mg/Kg	J	Q
LEAD	6.83		0.0104	MDL	0.203	PQL	mg/Kg	J	Q
NICKEL	14.0		0.102	MDL	0.407	PQL	mg/Kg	J	Q
SILVER	0.0373	J	0.0144	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.295		0.0305	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	37.9		0.0224	MDL	0.102	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-190-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 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	0.246	J	0.0588	MDL	0.406	PQL	mg/Kg	J	Z, Q

Sample ID: SL-190-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 3:51:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.07		0.0507	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-190-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 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	0.310		0.0751	MDL	0.203	PQL	mg/Kg	J	Q, Q
ARSENIC	6.24		0.0811	MDL	0.406	PQL	mg/Kg	J	Q
BERYLLIUM	0.695		0.0162	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	0.473		0.0446	MDL	0.101	PQL	mg/Kg	J	Q, E
CHROMIUM	20.7		0.122	MDL	0.406	PQL	mg/Kg	J	Q
COBALT	7.86		0.0203	MDL	0.101	PQL	mg/Kg	J	E
COPPER	13.5		0.0811	MDL	0.406	PQL	mg/Kg	J	Q
LEAD	27.8		0.0103	MDL	0.203	PQL	mg/Kg	J	Q
NICKEL	15.1		0.101	MDL	0.406	PQL	mg/Kg	J	Q
SILVER	1.68		0.0144	MDL	0.101	PQL	mg/Kg	J	Q
THALLIUM	0.352		0.0304	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	34.0		0.0223	MDL	0.101	PQL	mg/Kg	J	Q, A

Sample ID: SL-192-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 3:23:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.256	J	0.0575	MDL	0.397	PQL	mg/Kg	J	Z, Q

Sample ID: SL-192-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 3:23:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.834		0.0496	MDL	0.0991	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory:** LL

EDD Filename: PrepDE208_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-192-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 3:23:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.130	J	0.0734	MDL	0.198	PQL	mg/Kg	J	Z, Q, Q
ARSENIC	5.50		0.0793	MDL	0.397	PQL	mg/Kg	J	Q
BERYLLIUM	0.603		0.0159	MDL	0.0991	PQL	mg/Kg	J	Q
CADMIUM	0.320		0.0436	MDL	0.0991	PQL	mg/Kg	J	Q, E
CHROMIUM	14.0		0.119	MDL	0.397	PQL	mg/Kg	J	Q
COBALT	6.33		0.0198	MDL	0.0991	PQL	mg/Kg	J	E
COPPER	7.42		0.0793	MDL	0.397	PQL	mg/Kg	J	Q
LEAD	10.9		0.0101	MDL	0.198	PQL	mg/Kg	J	Q
NICKEL	9.54		0.0991	MDL	0.397	PQL	mg/Kg	J	Q
SILVER	0.0478	J	0.0141	MDL	0.0991	PQL	mg/Kg	J	Z, Q
THALLIUM	0.292		0.0297	MDL	0.0991	PQL	mg/Kg	J	Q
VANADIUM	27.3		0.0218	MDL	0.0991	PQL	mg/Kg	J	Q, A

Sample ID: SL-193-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 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	0.221	J	0.0576	MDL	0.397	PQL	mg/Kg	J	Z, Q

Sample ID: SL-193-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 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	0.890		0.0497	MDL	0.0993	PQL	mg/Kg	J	Q

Sample ID: SL-193-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 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	0.193	J	0.0735	MDL	0.199	PQL	mg/Kg	J	Z, Q, Q
ARSENIC	7.59		0.0795	MDL	0.397	PQL	mg/Kg	J	Q
BERYLLIUM	0.838		0.0159	MDL	0.0993	PQL	mg/Kg	J	Q
CADMIUM	0.385		0.0437	MDL	0.0993	PQL	mg/Kg	J	Q, E
CHROMIUM	23.4		0.119	MDL	0.397	PQL	mg/Kg	J	Q
COBALT	7.43		0.0199	MDL	0.0993	PQL	mg/Kg	J	E
COPPER	15.8		0.0795	MDL	0.397	PQL	mg/Kg	J	Q
LEAD	11.4		0.0101	MDL	0.199	PQL	mg/Kg	J	Q
NICKEL	15.7		0.0993	MDL	0.397	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory:** LL

EDD Filename: PrepDE208_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-193-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 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
SILVER	0.0605	J	0.0141	MDL	0.0993	PQL	mg/Kg	J	Z, Q
THALLIUM	0.400		0.0298	MDL	0.0993	PQL	mg/Kg	J	Q
VANADIUM	40.6		0.0219	MDL	0.0993	PQL	mg/Kg	J	Q, A

Sample ID: SL-235-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 8:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0588	MDL	0.406	PQL	mg/Kg	J	Z, Q

Sample ID: SL-235-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 8:15:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.545		0.0507	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-235-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0993	J	0.0751	MDL	0.203	PQL	mg/Kg	J	Z, Q, Q
ARSENIC	6.32		0.0811	MDL	0.406	PQL	mg/Kg	J	Q
BERYLLIUM	0.680		0.0162	MDL	0.101	PQL	mg/Kg	J	Q
CADMIUM	0.206		0.0446	MDL	0.101	PQL	mg/Kg	J	Q, E
CHROMIUM	20.9		0.122	MDL	0.406	PQL	mg/Kg	J	Q
COBALT	6.34		0.0203	MDL	0.101	PQL	mg/Kg	J	E
COPPER	11.5		0.0811	MDL	0.406	PQL	mg/Kg	J	Q
LEAD	11.8		0.0103	MDL	0.203	PQL	mg/Kg	J	Q
NICKEL	15.9		0.101	MDL	0.406	PQL	mg/Kg	J	Q
SILVER	0.0905	J	0.0144	MDL	0.101	PQL	mg/Kg	J	Z, Q
THALLIUM	0.283		0.0304	MDL	0.101	PQL	mg/Kg	J	Q
VANADIUM	34.1		0.0223	MDL	0.101	PQL	mg/Kg	J	Q, A

Sample ID: SL-236-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 7:52:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.155	J	0.0569	MDL	0.392	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory: LL**

EDD Filename: PrepDE208_v2 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-236-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 7:52:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.655		0.0490	MDL	0.0981	PQL	mg/Kg	J	Q

Sample ID: SL-236-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 7:52:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0726	MDL	0.196	PQL	mg/Kg	J	Z, Q, Q
ARSENIC	4.82		0.0785	MDL	0.392	PQL	mg/Kg	J	Q
BERYLLIUM	0.564		0.0157	MDL	0.0981	PQL	mg/Kg	J	Q
CADMIUM	0.267		0.0431	MDL	0.0981	PQL	mg/Kg	J	Q, E
CHROMIUM	20.2		0.118	MDL	0.392	PQL	mg/Kg	J	Q
COBALT	6.75		0.0196	MDL	0.0981	PQL	mg/Kg	J	E
COPPER	10.9		0.0785	MDL	0.392	PQL	mg/Kg	J	Q
LEAD	12.0		0.0100	MDL	0.196	PQL	mg/Kg	J	Q
NICKEL	16.1		0.0981	MDL	0.392	PQL	mg/Kg	J	Q
SILVER	0.0925	J	0.0139	MDL	0.0981	PQL	mg/Kg	J	Z, Q
THALLIUM	0.289		0.0294	MDL	0.0981	PQL	mg/Kg	J	Q
VANADIUM	35.3		0.0216	MDL	0.0981	PQL	mg/Kg	J	Q, A

Sample ID: SL-245-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 11:39:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.532		0.0563	MDL	0.388	PQL	mg/Kg	J	Q

Sample ID: SL-245-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 11:39:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.791		0.0486	MDL	0.0971	PQL	mg/Kg	J	Q

Sample ID: SL-245-SA6-SS-0.0-0.5 **Collected:** 7/25/2011 11:39:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.137	J	0.0719	MDL	0.194	PQL	mg/Kg	J	Z, Q, Q
ARSENIC	7.42		0.0777	MDL	0.388	PQL	mg/Kg	J	Q
BERYLLIUM	0.738		0.0155	MDL	0.0971	PQL	mg/Kg	J	Q
CADMIUM	0.508		0.0427	MDL	0.0971	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-009-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE208 **Laboratory:** LL

EDD Filename: PrepDE208_v2 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-245-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 11:39:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.9		0.117	MDL	0.388	PQL	mg/Kg	J	Q
COBALT	6.28		0.0194	MDL	0.0971	PQL	mg/Kg	J	E
COPPER	11.9		0.0777	MDL	0.388	PQL	mg/Kg	J	Q
LEAD	11.2		0.0099	MDL	0.194	PQL	mg/Kg	J	Q
NICKEL	14.5		0.0971	MDL	0.388	PQL	mg/Kg	J	Q
SILVER	0.0697	J	0.0138	MDL	0.0971	PQL	mg/Kg	J	Z, Q
THALLIUM	0.335		0.0291	MDL	0.0971	PQL	mg/Kg	J	Q
VANADIUM	37.5		0.0214	MDL	0.0971	PQL	mg/Kg	J	Q, A

Sample ID: SL-253-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 2:21:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0573	MDL	0.395	PQL	mg/Kg	J	Z, Q

Sample ID: SL-253-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 2:21:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.648		0.0494	MDL	0.0988	PQL	mg/Kg	J	Q

Sample ID: SL-253-SA6-SS-0.0-0.5 ***Collected:*** 7/25/2011 2:21:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.125	J	0.0731	MDL	0.198	PQL	mg/Kg	J	Z, Q, Q
ARSENIC	5.38		0.0791	MDL	0.395	PQL	mg/Kg	J	Q
BERYLLIUM	0.663		0.0158	MDL	0.0988	PQL	mg/Kg	J	Q
CADMIUM	0.320		0.0435	MDL	0.0988	PQL	mg/Kg	J	Q, E
CHROMIUM	15.3		0.119	MDL	0.395	PQL	mg/Kg	J	Q
COBALT	4.94		0.0198	MDL	0.0988	PQL	mg/Kg	J	E
COPPER	8.14		0.0791	MDL	0.395	PQL	mg/Kg	J	Q
LEAD	6.96		0.0101	MDL	0.198	PQL	mg/Kg	J	Q
NICKEL	9.94		0.0988	MDL	0.395	PQL	mg/Kg	J	Q
SILVER	0.0559	J	0.0140	MDL	0.0988	PQL	mg/Kg	J	Z, Q
THALLIUM	0.281		0.0296	MDL	0.0988	PQL	mg/Kg	J	Q
VANADIUM	28.9		0.0217	MDL	0.0988	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

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