Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: AQ**

Sample ID: EB-111512 *Collected:* 11/15/2012 3:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.035	J B	0.0044	MDL	0.10	MRL	mg/L	U	B
SODIUM	0.15	J B	0.092	MDL	1.0	MRL	mg/L	U	B, B

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-581-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 7:50:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	24	J ^	0.30	MDL	36	MRL	mg/Kg	J	Z
Zirconium	1.3	J	0.35	MDL	8.5	MRL	mg/Kg	U	B

Sample ID: SL-581-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 7:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.3	J	0.96	MDL	9.5	MRL	mg/Kg	U	F
MANGANESE	290	J	0.098	MDL	490	MRL	mg/Kg	J	Z
POTASSIUM	3800	J	40	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	86	J	58	MDL	490	MRL	mg/Kg	J	Z
TIN	1.5	J	0.90	MDL	11	MRL	mg/Kg	J	Z

Sample ID: SL-583-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 9:45:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	26	J ^	0.30	MDL	36	MRL	mg/Kg	J	Z
Zirconium	1.6	J	0.35	MDL	8.5	MRL	mg/Kg	U	B

Sample ID: SL-583-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 9:45:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-583-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 9:45:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.2	J	0.97	MDL	9.6	MRL	mg/Kg	U	F
MANGANESE	290	J	0.099	MDL	490	MRL	mg/Kg	J	Z
POTASSIUM	2500	J	40	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	110	J	58	MDL	490	MRL	mg/Kg	J	Z
TIN	1.6	J	0.90	MDL	11	MRL	mg/Kg	J	Z

Sample ID: SL-606-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 11:10:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	24	J ^	0.30	MDL	37	MRL	mg/Kg	J	Z
Zirconium	1.8	J	0.35	MDL	8.6	MRL	mg/Kg	U	B

Sample ID: SL-606-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 11:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
BORON	2.0	J	0.98	MDL	9.7	MRL	mg/Kg	U	F
MANGANESE	350	J	0.10	MDL	490	MRL	mg/Kg	J	Z
POTASSIUM	4400	J	41	MDL	6400	MRL	mg/Kg	J	Z
SODIUM	97	J	59	MDL	500	MRL	mg/Kg	J	Z
TIN	1.7	J	0.91	MDL	11	MRL	mg/Kg	J	Z

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 2:20:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	20	J ^	0.29	MDL	36	MRL	mg/Kg	J	Z
Zirconium	3.2	J	0.34	MDL	8.4	MRL	mg/Kg	J	Z

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 2:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	3.8	J	0.95	MDL	9.4	MRL	mg/Kg	U	F

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 2:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	350	J	0.097	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	3100	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	150	J	57	MDL	490	MRL	mg/Kg	J	Z
TIN	10	J	0.89	MDL	11	MRL	mg/Kg	J	Z

Sample ID: SL-640-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 1:37:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	21	J ^	0.26	MDL	33	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.31	MDL	7.6	MRL	mg/Kg	U	B

Sample ID: SL-640-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 1:37:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	3.0	J	0.86	MDL	8.5	MRL	mg/Kg	U	F
MANGANESE	280	J	0.088	MDL	440	MRL	mg/Kg	J	Z
POTASSIUM	3800	J	36	MDL	5600	MRL	mg/Kg	J	Z
SODIUM	67	J	52	MDL	440	MRL	mg/Kg	U	F
TIN	1.3	J	0.80	MDL	9.6	MRL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: AQ**

Sample ID: EB-111512 *Collected:* 11/15/2012 3:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.00043	J	0.000033	MDL	0.0050	MRL	mg/L	U	B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-581-SA6-SB-0.0-0.5 **Collected:** 11/15/2012 7:50:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.031	J	0.014	MDL	8.4	MRL	mg/Kg	J	Z, Q
ARSENIC	3.6	J	0.049	MDL	14	MRL	mg/Kg	J	Z
BARIUM	86	J	0.068	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.51	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.29	J	0.0091	MDL	0.96	MRL	mg/Kg	J	Z
CHROMIUM	18	J	0.073	MDL	36	MRL	mg/Kg	J	Z
COBALT	5.7	J	0.0064	MDL	20	MRL	mg/Kg	J	Z
COPPER	9.5	J B	0.069	MDL	28	MRL	mg/Kg	J	Z
LEAD	11	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.33	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	13	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SELENIUM	0.70	B	0.13	MDL	0.63	MRL	mg/Kg	U	B
SILVER	0.068	J	0.020	MDL	0.76	MRL	mg/Kg	U	F
THALLIUM	0.25	J	0.0034	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	32	J	0.037	MDL	60	MRL	mg/Kg	J	Z
ZINC	63	J	0.30	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-583-SA6-SB-0.0-0.5 **Collected:** 11/15/2012 9:45:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.029	J	0.013	MDL	7.8	MRL	mg/Kg	J	Z, Q
ARSENIC	4.4	J	0.045	MDL	13	MRL	mg/Kg	J	Z
BARIUM	77	J	0.063	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.62	J	0.020	MDL	0.99	MRL	mg/Kg	J	Z
CADMIUM	0.14	J	0.0084	MDL	0.90	MRL	mg/Kg	J	Z
CHROMIUM	24	J	0.068	MDL	33	MRL	mg/Kg	J	Z
COBALT	7.0	J	0.0060	MDL	19	MRL	mg/Kg	J	Z
COPPER	11	J B	0.064	MDL	26	MRL	mg/Kg	J	Z
LEAD	5.7	J	0.016	MDL	31	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.016	MDL	4.8	MRL	mg/Kg	J	Z
NICKEL	14	J	0.023	MDL	26	MRL	mg/Kg	J	Z
SELENIUM	0.66	B	0.12	MDL	0.59	MRL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-583-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 9:45:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.030	J	0.018	MDL	0.71	MRL	mg/Kg	U	F
THALLIUM	0.28	J	0.0032	MDL	0.41	MRL	mg/Kg	J	Z
VANADIUM	40	J	0.035	MDL	56	MRL	mg/Kg	J	Z
ZINC	53	J	0.28	MDL	99	MRL	mg/Kg	J	Z

Sample ID: SL-606-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 11:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.036	J	0.013	MDL	8.3	MRL	mg/Kg	J	Z, Q
ARSENIC	4.2	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	110	J	0.067	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.70	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.43	J	0.0089	MDL	0.95	MRL	mg/Kg	J	Z
CHROMIUM	23	J	0.072	MDL	35	MRL	mg/Kg	J	Z
COBALT	6.8	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	14	J B	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	18	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.46	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	17	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SELENIUM	0.80	B	0.13	MDL	0.62	MRL	mg/Kg	U	B
SILVER	0.61	J	0.019	MDL	0.75	MRL	mg/Kg	J	Z
THALLIUM	0.28	J	0.0033	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	36	J	0.037	MDL	59	MRL	mg/Kg	J	Z

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 2:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	2.6	J	0.014	MDL	9.0	MRL	mg/Kg	J	Z, Q
ARSENIC	7.1	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	110	J	0.073	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.85	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	23	J	0.078	MDL	38	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 2:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	12	J	0.0068	MDL	22	MRL	mg/Kg	J	Z
MOLYBDENUM	0.53	J	0.018	MDL	5.5	MRL	mg/Kg	J	Z
NICKEL	18	J	0.026	MDL	30	MRL	mg/Kg	J	Z
THALLIUM	0.24	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	39	J	0.040	MDL	64	MRL	mg/Kg	J	Z

Sample ID: SL-640-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 1:37:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.034	J	0.013	MDL	8.2	MRL	mg/Kg	J	Z, Q
ARSENIC	3.1	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	84	J	0.067	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.50	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.40	J	0.0089	MDL	0.95	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.072	MDL	35	MRL	mg/Kg	J	Z
COBALT	4.9	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	8.3	J B	0.067	MDL	27	MRL	mg/Kg	J	Z
LEAD	16	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.37	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	11	J	0.024	MDL	27	MRL	mg/Kg	J	Z
SELENIUM	0.73	B	0.13	MDL	0.62	MRL	mg/Kg	U	B
SILVER	0.17	J	0.019	MDL	0.75	MRL	mg/Kg	U	F
THALLIUM	0.24	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z
VANADIUM	29	J	0.036	MDL	59	MRL	mg/Kg	J	Z
ZINC	64	J	0.30	MDL	100	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-581-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 7:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.011	J	0.0060	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-583-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 9:45:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0087	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-562-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
EFH(C15-C20)	1.3	J	0.97	MDL	4.8	MRL	mg/Kg	J	Z

Sample ID: SL-581-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 7:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	2.5	J	0.93	MDL	4.7	MRL	mg/Kg	J	Z

Sample ID: SL-583-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
EFH(C30-C40)	6.5	J	0.94	MDL	9.4	MRL	mg/Kg	J	Z

Sample ID: SL-606-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
EFH(C15-C20)	1.4	J	0.95	MDL	4.7	MRL	mg/Kg	J	Z
EFH(C21-C30)	4.0	J	0.95	MDL	4.7	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	8.2	J p	6.0	MDL	33	MRL	ug/Kg	J	Z

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

Sample ID: EB-111512 *Collected:* 11/15/2012 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.0078	J	0.0051	MDL	0.10	MRL	ug/L	J	Z
NAPHTHALENE	0.023	J B	0.0053	MDL	0.10	MRL	ug/L	U	B
PHENANTHRENE	0.011	J B	0.0097	MDL	0.10	MRL	ug/L	U	B
PYRENE	0.0081	U *	0.0081	MDL	0.10	MRL	ug/L	UJ	E

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

Sample ID: SL-581-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 7:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.35	J	0.25	MDL	9.6	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.67	J	0.30	MDL	9.6	MRL	ug/Kg	J	Z
ACENAPHTHENE	0.45	J	0.15	MDL	9.6	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.38	J	0.16	MDL	9.6	MRL	ug/Kg	J	Z
ANTHRACENE	1.5	J	0.69	MDL	9.6	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.87	MDL	9.6	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	0.83	J	0.71	MDL	9.6	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.7	J	1.2	MDL	9.6	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.96	J	0.96	MDL	9.6	MRL	ug/Kg	J	Z
CHRYSENE	4.7	J	0.96	MDL	9.6	MRL	ug/Kg	J	Z
FLUORENE	0.75	J	0.45	MDL	9.6	MRL	ug/Kg	J	Z
NAPHTHALENE	0.88	J	0.31	MDL	9.6	MRL	ug/Kg	J	Z
PHENANTHRENE	7.5	J	1.1	MDL	9.6	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-581-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 7:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	7.3	J	1.1	MDL	9.6	MRL	ug/Kg	J	Z

Sample ID: SL-606-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
1-METHYLNAPHTHALENE	0.45	J	0.25	MDL	9.4	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.69	J	0.29	MDL	9.4	MRL	ug/Kg	J	Z
ACENAPHTHENE	0.27	J	0.15	MDL	9.4	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.82	J	0.16	MDL	9.4	MRL	ug/Kg	J	Z
ANTHRACENE	1.8	J	0.68	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	3.4	J	0.85	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	3.0	J	0.70	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	9.3	J	1.1	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	2.5	J	1.0	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	3.0	J	0.94	MDL	9.4	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.8	J	1.0	MDL	9.4	MRL	ug/Kg	J	Z
NAPHTHALENE	0.87	J	0.31	MDL	9.4	MRL	ug/Kg	J	Z

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
1-METHYLNAPHTHALENE	0.82	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.32	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	2.6	J	0.92	MDL	10	MRL	ug/Kg	J	Z, Q
BENZO(A)PYRENE	3.6	J	0.76	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	8.6	J	1.2	MDL	10	MRL	ug/Kg	J	Z, Q, Q
BENZO(G,H,I)PERYLENE	9.7	J	1.1	MDL	10	MRL	ug/Kg	J	Z, Q, Q
CHRYSENE	4.0	J	1.0	MDL	10	MRL	ug/Kg	J	Z, Q, Q
DIBENZO(A,H)ANTHRACENE	2.7	J	1.3	MDL	10	MRL	ug/Kg	J	Z, Q
FLUORANTHENE	3.2	J	1.0	MDL	10	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	4.4	J	1.1	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	2.5	J	0.33	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
PHENANTHRENE	2.7	J	1.1	MDL	10	MRL	ug/Kg	J	Z
PYRENE	1.4	J	1.1	MDL	10	MRL	ug/Kg	J	Z, Q, Q

Sample ID: SL-640-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
1-METHYLNAPHTHALENE	0.36	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.48	J	0.32	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	0.78	J	0.33	MDL	10	MRL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B GRO **Matrix: AQ**

Sample ID: EB-111512 *Collected:* 11/15/2012 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C4-C12)	10	J	10	MDL	25	MRL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Laboratory Control Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Rejection
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-35982-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148014/1-A	11/20/2012 10:19:00 PM	BORON SODIUM	0.0379 mg/L 0.166 mg/L	EB-111512

The 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-111512(RES/TOT)	BORON	0.035 mg/L	0.035U mg/L
EB-111512(RES/TOT)	SODIUM	0.15 mg/L	0.15U mg/L

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148542/1-A	11/23/2012 9:08:00 PM	COPPER SELENIUM	0.0808 mg/Kg 0.182 mg/Kg	SL-581-SA6-SB-0.0-0.5 SL-583-SA6-SB-0.0-0.5 SL-606-SA6-SB-0.0-0.5 SL-638-SA6-SB-0.0-0.5 SL-640-SA6-SB-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-581-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.70 mg/Kg	0.70U mg/Kg
SL-583-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.66 mg/Kg	0.66U mg/Kg
SL-606-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.80 mg/Kg	0.80U mg/Kg
SL-640-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.73 mg/Kg	0.73U mg/Kg

Method: 8015B EFH
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148679/1-A	11/24/2012 2:53:00 AM	TOTAL EFH(C8-C40)	0.103 mg/L	EB-111512

Method: 8015B EFH
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148519/1-A	11/23/2012 5:10:00 PM	TOTAL EFH(C8-C40)	0.870 mg/Kg	SL-562-SA6-SB-0.0-0.5 SL-581-SA6-SB-0.0-0.5 SL-583-SA6-SB-0.0-0.5 SL-606-SA6-SB-0.0-0.5 SL-638-SA6-SB-0.0-0.5 SL-640-SA6-SB-0.0-0.5

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Method Blank Outlier Report

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **8015B EFH**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148666/1-A	11/27/2012 4:55:00 PM	BENZO(G,H,I)PERYLENE	0.00441 ug/L	EB-111512
		CHRYSENE	0.00337 ug/L	
		FLUORANTHENE	0.00769 ug/L	
		NAPHTHALENE	0.00552 ug/L	
		PHENANTHRENE	0.0136 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-111512(RES)	NAPHTHALENE	0.023 ug/L	0.10U ug/L
EB-111512(RES)	PHENANTHRENE	0.011 ug/L	0.10U ug/L

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: Prep280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-111512(RES/TOT)	11/15/2012 3:00:00 PM	BORON SODIUM	0.035 mg/L 0.15 mg/L	SL-562-SA6-SB-0.0-0.5 SL-581-SA6-SB-0.0-0.5 SL-583-SA6-SB-0.0-0.5 SL-606-SA6-SB-0.0-0.5 SL-638-SA6-SB-0.0-0.5 SL-640-SA6-SB-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-581-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.3 mg/Kg	1.3U mg/Kg
SL-583-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.2 mg/Kg	1.2U mg/Kg
SL-606-SA6-SB-0.0-0.5(RES/TOT)	BORON	2.0 mg/Kg	2.0U mg/Kg
SL-638-SA6-SB-0.0-0.5(RES/TOT)	BORON	3.8 mg/Kg	3.8U mg/Kg
SL-640-SA6-SB-0.0-0.5(RES/TOT)	BORON	3.0 mg/Kg	3.0U mg/Kg
SL-640-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	67 mg/Kg	67U mg/Kg

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-111512(RES/TOT)	11/15/2012 3:00:00 PM	SILVER	0.00043 mg/L	SL-562-SA6-SB-0.0-0.5 SL-581-SA6-SB-0.0-0.5 SL-583-SA6-SB-0.0-0.5 SL-606-SA6-SB-0.0-0.5 SL-638-SA6-SB-0.0-0.5 SL-640-SA6-SB-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-581-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.068 mg/Kg	0.068U mg/Kg
SL-583-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.030 mg/Kg	0.030U mg/Kg
SL-640-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.17 mg/Kg	0.17U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8081B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-638-SA6-SB-0.0-0.5MS SL-638-SA6-SB-0.0-0.5MSD (SL-638-SA6-SB-0.0-0.5)	4,4'-DDE	-	-	58.00-121.00	43 (15.00)	4,4'-DDE	No Qual Diluted Out
	4,4'-DDT	150	-	57.00-133.00	33 (29.00)	4,4'-DDT	
	BETA-BHC	-	-	67.00-115.00	27 (17.00)	BETA-BHC	
	DELTA-BHC	-	-	67.00-115.00	24 (19.00)	DELTA-BHC	
	DIELDRIN	-	-	65.00-127.00	29 (25.00)	DIELDRIN	
	gamma-BHC (Lindane)	-	-	63.00-118.00	27 (24.00)	gamma-BHC (Lindane)	
	HEPTACHLOR	-	-	68.00-115.00	24 (18.00)	HEPTACHLOR	
	METHOXYCHLOR	-	-	67.00-130.00	47 (23.00)	METHOXYCHLOR	
SL-638-SA6-SB-0.0-0.5MS SL-638-SA6-SB-0.0-0.5MSD (SL-638-SA6-SB-0.0-0.5)	4,4'-DDD	-	0	54.00-130.00	-	4,4'-DDD	No Qual Diluted Out
	TOXAPHENE	0	0	19.00-174.00	-	TOXAPHENE	
SL-638-SA6-SB-0.0-0.5MSD (SL-638-SA6-SB-0.0-0.5)	ENDOSULFAN I	-	64	65.00-118.00	-	ENDOSULFAN I	No Qual Diluted Out
	ENDOSULFAN II	-	60	71.00-118.00	52 (20.00)	ENDOSULFAN II	
	ENDOSULFAN SULFATE	-	57	67.00-123.00	28 (22.00)	ENDOSULFAN SULFATE	
	ENDRIN	-	72	77.00-134.00	54 (30.00)	ENDRIN	
	ENDRIN ALDEHYDE	-	39	47.00-115.00	46 (29.00)	ENDRIN ALDEHYDE	
	ENDRIN KETONE	-	49	62.00-115.00	51 (20.00)	ENDRIN KETONE	
	HEPTACHLOR EPOXIDE	-	63	66.00-117.00	39 (18.00)	HEPTACHLOR EPOXIDE	

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-640-SA6-SB-0.0-0.5MS (TOT) SL-640-SA6-SB-0.0-0.5MSD (TOT) (SL-581-SA6-SB-0.0-0.5 SL -583-SA6-SB-0.0-0.5 SL -606-SA6-SB-0.0-0.5 SL -638-SA6-SB-0.0-0.5 SL -640-SA6-SB-0.0-0.5)	ALUMINUM	1833	2281	75.00-125.00	-	ALUMINUM	No Qual, >4x
	IRON	660	1480	75.00-125.00	-	IRON	
	TITANIUM	202	223	75.00-125.00	-	TITANIUM	

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-581-SA6-SB-0.0-0.5MS (TOT) SL-581-SA6-SB-0.0-0.5MSD (TOT) (SL-581-SA6-SB-0.0-0.5 SL-583-SA6-SB-0.0-0.5 SL -606-SA6-SB-0.0-0.5 SL -638-SA6-SB-0.0-0.5 SL -640-SA6-SB-0.0-0.5)	ANTIMONY	7	6	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike = 96%

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-638-SA6-SB-0.0-0.5MS	BENZO(A)ANTHRACENE	136	-	36.00-120.00	-	BENZO(A)ANTHRACENE	
SL-638-SA6-SB-0.0-0.5MSD	BENZO(B)FLUORANTHENE	167	-	37.00-120.00	47 (28.00)	BENZO(B)FLUORANTHENE	
(SL-638-SA6-SB-0.0-0.5)	BENZO(G,H,I)PERYLENE	165	-	20.00-123.00	37 (30.00)	BENZO(G,H,I)PERYLENE	J(all detects)
	CHRYSENE	242	-	34.00-120.00	66 (41.00)	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	-	-	20.00-120.00	26 (25.00)	DIBENZO(A,H)ANTHRACENE	
	PYRENE	125	-	43.00-120.00	33 (30.00)	PYRENE	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
LCSD 280 -148666/3 -A (EB-111512)	PYRENE	-	-	49.00-120.00	24 (22.00)	PYRENE	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-111512	BORON	J B	0.035	0.10	MRL	mg/L	J (all detects)
	SODIUM	J B	0.15	1.0	MRL	mg/L	

Method: 6020A
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-111512	SILVER	J	0.00043	0.0050	MRL	mg/L	J (all detects)

Method: 8015B GRO
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-111512	GASOLINE RANGE ORGANICS (C4-C12)	J	10	25	MRL	ug/L	J (all detects)

Method: 8270C SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-111512	2-METHYLNAPHTHALENE	J	0.0078	0.10	MRL	ug/L	J (all detects)
	NAPHTHALENE	J B	0.023	0.10	MRL	ug/L	
	PHENANTHRENE	J B	0.011	0.10	MRL	ug/L	

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-581-SA6-SB-0.0-0.5	ALUMINUM	J	13000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	1.3	9.5	MRL	mg/Kg	
	LITHIUM	J ^	24	36	MRL	mg/Kg	
	MANGANESE	J	290	490	MRL	mg/Kg	
	POTASSIUM	J	3800	6300	MRL	mg/Kg	
	SODIUM	J	86	490	MRL	mg/Kg	
	TIN	J	1.5	11	MRL	mg/Kg	
	Zirconium	J	1.3	8.5	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-583-SA6-SB-0.0-0.5	ALUMINUM	J	16000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	1.2	9.6	MRL	mg/Kg	
	LITHIUM	J ^	26	36	MRL	mg/Kg	
	MANGANESE	J	290	490	MRL	mg/Kg	
	POTASSIUM	J	2500	6300	MRL	mg/Kg	
	SODIUM	J	110	490	MRL	mg/Kg	
	TIN	J	1.6	11	MRL	mg/Kg	
	Zirconium	J	1.6	8.5	MRL	mg/Kg	
SL-606-SA6-SB-0.0-0.5	ALUMINUM	J	15000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	2.0	9.7	MRL	mg/Kg	
	LITHIUM	J ^	24	37	MRL	mg/Kg	
	MANGANESE	J	350	490	MRL	mg/Kg	
	POTASSIUM	J	4400	6400	MRL	mg/Kg	
	SODIUM	J	97	500	MRL	mg/Kg	
	TIN	J	1.7	11	MRL	mg/Kg	
	Zirconium	J	1.8	8.6	MRL	mg/Kg	
SL-638-SA6-SB-0.0-0.5	ALUMINUM	J	17000	19000	MRL	mg/Kg	J (all detects)
	BORON	J	3.8	9.4	MRL	mg/Kg	
	LITHIUM	J ^	20	36	MRL	mg/Kg	
	MANGANESE	J	350	480	MRL	mg/Kg	
	POTASSIUM	J	3100	6200	MRL	mg/Kg	
	SODIUM	J	150	490	MRL	mg/Kg	
	TIN	J	10	11	MRL	mg/Kg	
	Zirconium	J	3.2	8.4	MRL	mg/Kg	
SL-640-SA6-SB-0.0-0.5	ALUMINUM	J	11000	18000	MRL	mg/Kg	J (all detects)
	BORON	J	3.0	8.5	MRL	mg/Kg	
	LITHIUM	J ^	21	33	MRL	mg/Kg	
	MANGANESE	J	280	440	MRL	mg/Kg	
	POTASSIUM	J	3800	5600	MRL	mg/Kg	
	SODIUM	J	67	440	MRL	mg/Kg	
	TIN	J	1.3	9.6	MRL	mg/Kg	
	Zirconium	J	1.4	7.6	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-581-SA6-SB-0.0-0.5	ANTIMONY	J	0.031	8.4	MRL	mg/Kg	
	ARSENIC	J	3.6	14	MRL	mg/Kg	
	BARIUM	J	86	140	MRL	mg/Kg	
	BERYLLIUM	J	0.51	1.1	MRL	mg/Kg	
	CADMIUM	J	0.29	0.96	MRL	mg/Kg	
	CHROMIUM	J	18	36	MRL	mg/Kg	
	COBALT	J	5.7	20	MRL	mg/Kg	
	COPPER	J B	9.5	28	MRL	mg/Kg	J (all detects)
	LEAD	J	11	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.33	5.1	MRL	mg/Kg	
	NICKEL	J	13	28	MRL	mg/Kg	
	SILVER	J	0.068	0.76	MRL	mg/Kg	
	THALLIUM	J	0.25	0.44	MRL	mg/Kg	
	VANADIUM	J	32	60	MRL	mg/Kg	
	ZINC	J	63	110	MRL	mg/Kg	
SL-583-SA6-SB-0.0-0.5	ANTIMONY	J	0.029	7.8	MRL	mg/Kg	
	ARSENIC	J	4.4	13	MRL	mg/Kg	
	BARIUM	J	77	130	MRL	mg/Kg	
	BERYLLIUM	J	0.62	0.99	MRL	mg/Kg	
	CADMIUM	J	0.14	0.90	MRL	mg/Kg	
	CHROMIUM	J	24	33	MRL	mg/Kg	
	COBALT	J	7.0	19	MRL	mg/Kg	
	COPPER	J B	11	26	MRL	mg/Kg	J (all detects)
	LEAD	J	5.7	31	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	4.8	MRL	mg/Kg	
	NICKEL	J	14	26	MRL	mg/Kg	
	SILVER	J	0.030	0.71	MRL	mg/Kg	
	THALLIUM	J	0.28	0.41	MRL	mg/Kg	
	VANADIUM	J	40	56	MRL	mg/Kg	
	ZINC	J	53	99	MRL	mg/Kg	
SL-606-SA6-SB-0.0-0.5	ANTIMONY	J	0.036	8.3	MRL	mg/Kg	
	ARSENIC	J	4.2	14	MRL	mg/Kg	
	BARIUM	J	110	130	MRL	mg/Kg	
	BERYLLIUM	J	0.70	1.0	MRL	mg/Kg	
	CADMIUM	J	0.43	0.95	MRL	mg/Kg	
	CHROMIUM	J	23	35	MRL	mg/Kg	
	COBALT	J	6.8	20	MRL	mg/Kg	
	COPPER	J B	14	28	MRL	mg/Kg	J (all detects)
	LEAD	J	18	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.46	5.0	MRL	mg/Kg	
	NICKEL	J	17	28	MRL	mg/Kg	
	SILVER	J	0.61	0.75	MRL	mg/Kg	
	THALLIUM	J	0.28	0.44	MRL	mg/Kg	
	VANADIUM	J	36	59	MRL	mg/Kg	
SL-638-SA6-SB-0.0-0.5	ANTIMONY	J	2.6	9.0	MRL	mg/Kg	
	ARSENIC	J	7.1	15	MRL	mg/Kg	
	BARIUM	J	110	140	MRL	mg/Kg	
	BERYLLIUM	J	0.85	1.1	MRL	mg/Kg	
	CHROMIUM	J	23	38	MRL	mg/Kg	
	COBALT	J	12	22	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.53	5.5	MRL	mg/Kg	
	NICKEL	J	18	30	MRL	mg/Kg	
	THALLIUM	J	0.24	0.47	MRL	mg/Kg	
	VANADIUM	J	39	64	MRL	mg/Kg	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Reporting Limit Outliers

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-640-SA6-SB-0.0-0.5	ANTIMONY	J	0.034	8.2	MRL	mg/Kg	
	ARSENIC	J	3.1	14	MRL	mg/Kg	
	BARIUM	J	84	130	MRL	mg/Kg	
	BERYLLIUM	J	0.50	1.0	MRL	mg/Kg	
	CADMIUM	J	0.40	0.95	MRL	mg/Kg	
	CHROMIUM	J	16	35	MRL	mg/Kg	
	COBALT	J	4.9	20	MRL	mg/Kg	
	COPPER	J B	8.3	27	MRL	mg/Kg	J (all detects)
	LEAD	J	16	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.37	5.0	MRL	mg/Kg	
	NICKEL	J	11	27	MRL	mg/Kg	
	SILVER	J	0.17	0.75	MRL	mg/Kg	
	THALLIUM	J	0.24	0.43	MRL	mg/Kg	
	VANADIUM	J	29	59	MRL	mg/Kg	
	ZINC	J	64	100	MRL	mg/Kg	

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-581-SA6-SB-0.0-0.5	MERCURY	J	0.011	0.022	MRL	mg/Kg	J (all detects)
SL-583-SA6-SB-0.0-0.5	MERCURY	J	0.0087	0.023	MRL	mg/Kg	J (all detects)

Method: 8015B EFH
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-562-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.3	4.8	MRL	mg/Kg	J (all detects)
SL-581-SA6-SB-0.0-0.5	EFH(C21-C30)	J	2.5	4.7	MRL	mg/Kg	J (all detects)
SL-583-SA6-SB-0.0-0.5	EFH(C30-C40)	J	6.5	9.4	MRL	mg/Kg	J (all detects)
SL-606-SA6-SB-0.0-0.5	EFH(C15-C20) EFH(C21-C30)	J J	1.4 4.0	4.7 4.7	MRL MRL	mg/Kg mg/Kg	J (all detects)

Method: 8081B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-638-SA6-SB-0.0-0.5	4,4'-DDT	J p	8.2	33	MRL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-35982-1 **Laboratory: TA DEN**

EDD Filename: 280-35982-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-581-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.35	9.6	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.67	9.6	MRL	ug/Kg	
	ACENAPHTHENE	J	0.45	9.6	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.38	9.6	MRL	ug/Kg	
	ANTHRACENE	J	1.5	9.6	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	9.6	MRL	ug/Kg	
	BENZO(A)PYRENE	J	0.83	9.6	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	2.7	9.6	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.96	9.6	MRL	ug/Kg	
	CHRYSENE	J	4.7	9.6	MRL	ug/Kg	
	FLUORENE	J	0.75	9.6	MRL	ug/Kg	
	NAPHTHALENE	J	0.88	9.6	MRL	ug/Kg	
	PHENANTHRENE	J	7.5	9.6	MRL	ug/Kg	
	PYRENE	J	7.3	9.6	MRL	ug/Kg	
SL-606-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.45	9.4	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.69	9.4	MRL	ug/Kg	
	ACENAPHTHENE	J	0.27	9.4	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.82	9.4	MRL	ug/Kg	
	ANTHRACENE	J	1.8	9.4	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	3.4	9.4	MRL	ug/Kg	
	BENZO(A)PYRENE	J	3.0	9.4	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	9.3	9.4	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	2.5	9.4	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	3.0	9.4	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	2.8	9.4	MRL	ug/Kg	
	NAPHTHALENE	J	0.87	9.4	MRL	ug/Kg	
SL-638-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.82	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.6	10	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	2.6	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	3.6	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	8.6	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	9.7	10	MRL	ug/Kg	
	CHRYSENE	J	4.0	10	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	2.7	10	MRL	ug/Kg	
	FLUORANTHENE	J	3.2	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	4.4	10	MRL	ug/Kg	
	NAPHTHALENE	J	2.5	10	MRL	ug/Kg	
	PHENANTHRENE	J	2.7	10	MRL	ug/Kg	
	PYRENE	J	1.4	10	MRL	ug/Kg	
SL-640-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.36	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.48	10	MRL	ug/Kg	
	NAPHTHALENE	J	0.78	10	MRL	ug/Kg	

LDC #: 29419N4
SDG #: 280-35982-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/2/13
Page: 1 of 5
Reviewer: CR
2nd Reviewer: J

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/15/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (~~Ba~~ em, Al, Fe, ~~Mn~~ sm, Ti, >4x, Sb RS=96% (J/UJ)
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	~~N~~ A	
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	SW	EB=6 ~~FB=FB-111112 (280-35930-1)~~ sm FB = FB-060512 (SDG 12F037)

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-581-SA6-SB-0.0-0.5	11		21		31	
2	SL-583-SA6-SB-0.0-0.5	12		22		32	
3	SL-606-SA6-SB-0.0-0.5	13		23		33	
4	SL-638-SA6-SB-0.0-0.5	14		24		34	
5	SL-640-SA6-SB-0.0-0.5	15		25		35	
6	EB-111512	16		26		36	
7	SL-581-SA6-SB-0.0-0.5MS (6020)	17		27		37	
8	SL-581-SA6-SB-0.0-0.5MSD	18		28		38	
9	SL-640-SA6-SB-0.0-0.5MS (6010)	19		29		39	
10	SL-640-SA6-SB-0.0-0.5MSD	20		30		40	

Notes: _____

LDC #: 29419N4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CA
2nd Reviewer: MC

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

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	6								
Na			182	0.91	0.15								
Ag			1.28	0.0064	0.00043								

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-3

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1	2	3						
Zr			6.22	3.11	1.3	1.6	1.8						

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 4, 5

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	5								
Zr			3.64	1.82	1.4								

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 29419N4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/15/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All Soil

Analyte	Blank ID	Blank ID	Sample Identification										
	EB-111512 (SDG: 280-35982-1)	Action Limit	1	2	3	4	5						
B	0.035	17.5	1.3	1.2	2.0	3.8	3.0						
Na	0.15	75					67						
Ag	0.00043	0.215	0.068	0.030			0.17						

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 #: 29419N4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 6/05/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: ~~FB~~ Associated Samples: All Soil (>5x)

Analyte	Blank ID	Sample Identification											
	FB-060512 (SDG: 12F037)	Action Limit											
Al	0.0270	13.5											
Ca	0.0263	13.15											
Cu	0.000954	0.477											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-35982-2

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Nov-2012	SL-581-SA6-SB-0.0-0.5	280-35982-4	N	1613	1613B	III
15-Nov-2012	SL-562-SA6-SB-0.0-0.5	280-35982-2	N	1613	1613B	III
15-Nov-2012	SL-583-SA6-SB-0.0-0.5	280-35982-6	N	1613	1613B	III
15-Nov-2012	SL-606-SA6-SB-0.0-0.5	280-35982-8	N	1613	1613B	III
15-Nov-2012	SL-640-SA6-SB-0.0-0.5	280-35982-12	N	1613	1613B	III
15-Nov-2012	SL-638-SA6-SB-0.0-0.5	280-35982-10	N	1613	1613B	III
15-Nov-2012	EB-111512	280-35982-13	EB	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-2 **Laboratory: TA DEN**

EDD Filename: 280-35982-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix: AQ**

Sample ID: EB-111512 *Collected:* 11/15/2012 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.45	B J	0.12	MDL	51	MRL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.16	Q B J	0.047	MDL	51	MRL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.12	Q B J	0.066	MDL	51	MRL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.24	J	0.098	MDL	51	MRL	pg/L	J	Z
1,2,3,6,7,8-HXCDF	0.23	Q B J	0.058	MDL	51	MRL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.20	Q B J	0.068	MDL	51	MRL	pg/L	U	B
1,2,3,7,8-PECDD	0.37	B J	0.086	MDL	51	MRL	pg/L	U	B
1,2,3,7,8-PECDF	0.18	Q B J	0.069	MDL	51	MRL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.20	B J	0.057	MDL	51	MRL	pg/L	U	B
2,3,4,7,8-PECDF	0.13	Q B J	0.069	MDL	51	MRL	pg/L	U	B
2,3,7,8-TCDD	0.12	Q J	0.063	MDL	10	MRL	pg/L	J	Z
OCDD	3.8	B J	0.073	MDL	100	MRL	pg/L	U	B
OCDF	0.58	B J	0.077	MDL	100	MRL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-562-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.4	J	0.078	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.27	J	0.13	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.34	Q J	0.083	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.23	J	0.053	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.89	J	0.081	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.15	Q J	0.054	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.88	J	0.077	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.20	Q J	0.11	MDL	5.2	MRL	ng/kg	J	Z
OCDF	5.3	J	0.10	MDL	10	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-2 **Laboratory: TA DEN**

EDD Filename: 280-35982-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-581-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 7:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.0	J	0.096	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.78	J	0.070	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.0	J	0.036	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	2.7	J	0.063	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.89	Q J	0.039	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	2.4	C J	0.062	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.13	J	0.047	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.38	Q J	0.087	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.17	J	0.065	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.30	Q J	0.040	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.20	J	0.060	MDL	5.0	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.30	J	0.092	MDL	1.0	MRL	ng/kg	J	Z

Sample ID: SL-583-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.2	J	0.058	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.19	Q J	0.10	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.24	J	0.059	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.14	J	0.037	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.52	J	0.059	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.12	Q J	0.035	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.68	J	0.055	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.22	Q J	0.064	MDL	5.1	MRL	ng/kg	J	Z
OCDF	3.3	J	0.056	MDL	10	MRL	ng/kg	J	Z

Sample ID: SL-606-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	4.7	J	0.10	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	2.8	J	0.068	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	2.7	J	0.038	MDL	5.1	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-2 **Laboratory: TA DEN**

EDD Filename: 280-35982-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-606-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	2.6	Q J	0.036	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.29	Q J	0.044	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.99	Q J	0.093	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.43	J	0.069	MDL	5.1	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	1.0	J	0.039	MDL	5.1	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.55	J	0.066	MDL	5.1	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.52	J	0.092	MDL	1.0	MRL	ng/kg	J	Z

Sample ID: SL-638-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
1,2,3,4,7,8,9-HPCDF	2.1	J	0.14	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	1.6	J	0.15	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	4.2	Q J	0.13	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	4.3	J	0.20	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	1.7	Q J	0.14	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	3.4	J	0.16	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.28	Q J	0.19	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.91	Q J	0.17	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	1.1	J	0.20	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	2.5	J	0.16	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	1.8	J	0.17	MDL	5.2	MRL	ng/kg	J	Z

Sample ID: SL-640-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
1,2,3,4,6,7,8-HPCDF	1.6	J	0.087	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.47	Q J	0.17	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.27	J	0.11	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.47	Q J	0.062	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.70	Q J	0.11	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.32	Q J	0.062	MDL	5.1	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-2 **Laboratory: TA DEN**

EDD Filename: 280-35982-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-640-SA6-SB-0.0-0.5 *Collected:* 11/15/2012 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
1,2,3,7,8,9-HXCDD	0.75	J	0.10	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.39	Q J	0.11	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.25	Q J	0.087	MDL	5.1	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.30	Q J	0.065	MDL	5.1	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.30	J	0.078	MDL	5.1	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.58	J	0.14	MDL	1.0	MRL	ng/kg	J	Z
OCDF	2.2	J	0.16	MDL	10	MRL	ng/kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-35982-2 **Laboratory: TA DEN**

EDD Filename: 280-35982-2 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-35982-2/
H2K200405

Method Blank Outlier Report

Lab Reporting Batch ID: 280-35982-2 **Laboratory: TA DEN**

EDD Filename: 280-35982-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2K200000044B	11/28/2012 2:39:00 AM	1,2,3,4,6,7,8-HPCDD	1.3 pg/L	EB-111512
		1,2,3,4,6,7,8-HPCDF	1.1 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.94 pg/L	
		1,2,3,4,7,8-HxCDD	0.52 pg/L	
		1,2,3,4,7,8-HXCDF	0.45 pg/L	
		1,2,3,6,7,8-HXCDF	0.59 pg/L	
		1,2,3,7,8,9-HXCDD	0.61 pg/L	
		1,2,3,7,8,9-HXCDF	0.69 pg/L	
		1,2,3,7,8-PECDD	0.55 pg/L	
		1,2,3,7,8-PECDF	0.45 pg/L	
		2,3,4,6,7,8-HXCDF	0.38 pg/L	
		2,3,4,7,8-PECDF	0.59 pg/L	
		OCDD	13 pg/L	
		OCDF	3.9 pg/L	

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-111512(RES)	1,2,3,4,6,7,8-HPCDD	0.45 pg/L	0.45U pg/L
EB-111512(RES)	1,2,3,4,6,7,8-HPCDF	0.16 pg/L	0.16U pg/L
EB-111512(RES)	1,2,3,4,7,8,9-HPCDF	0.12 pg/L	0.12U pg/L
EB-111512(RES)	1,2,3,6,7,8-HXCDF	0.23 pg/L	0.23U pg/L
EB-111512(RES)	1,2,3,7,8,9-HXCDF	0.20 pg/L	0.20U pg/L
EB-111512(RES)	1,2,3,7,8-PECDD	0.37 pg/L	0.37U pg/L
EB-111512(RES)	1,2,3,7,8-PECDF	0.18 pg/L	0.18U pg/L
EB-111512(RES)	2,3,4,6,7,8-HXCDF	0.20 pg/L	0.20U pg/L
EB-111512(RES)	2,3,4,7,8-PECDF	0.13 pg/L	0.13U pg/L
EB-111512(RES)	OCDD	3.8 pg/L	3.8U pg/L
EB-111512(RES)	OCDF	0.58 pg/L	0.58U pg/L

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2K200000037B	11/29/2012 1:33:00 PM	OCDD	0.38 ng/kg	SL-562-SA6-SB-0.0-0.5
				SL-581-SA6-SB-0.0-0.5
				SL-583-SA6-SB-0.0-0.5
				SL-606-SA6-SB-0.0-0.5
				SL-638-SA6-SB-0.0-0.5
				SL-640-SA6-SB-0.0-0.5

Reporting Limit Outliers

Lab Reporting Batch ID: 280-35982-2 **Laboratory: TA DEN**

EDD Filename: 280-35982-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-111512	1,2,3,4,6,7,8-HPCDD	B J	0.45	51	MRL	pg/L	
	1,2,3,4,6,7,8-HPCDF	Q B J	0.16	51	MRL	pg/L	
	1,2,3,4,7,8,9-HPCDF	Q B J	0.12	51	MRL	pg/L	
	1,2,3,6,7,8-HXCDD	J	0.24	51	MRL	pg/L	
	1,2,3,6,7,8-HXCDF	Q B J	0.23	51	MRL	pg/L	
	1,2,3,7,8,9-HXCDF	Q B J	0.20	51	MRL	pg/L	
	1,2,3,7,8-PECDD	B J	0.37	51	MRL	pg/L	J (all detects)
	1,2,3,7,8-PECDF	Q B J	0.18	51	MRL	pg/L	
	2,3,4,6,7,8-HXCDF	B J	0.20	51	MRL	pg/L	
	2,3,4,7,8-PECDF	Q B J	0.13	51	MRL	pg/L	
	2,3,7,8-TCDD	Q J	0.12	10	MRL	pg/L	
	OCDD	B J	3.8	100	MRL	pg/L	
	OCDF	B J	0.58	100	MRL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-562-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	3.4	5.2	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	J	0.27	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.34	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.23	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.89	5.2	MRL	ng/kg	J (all detects)
	1,2,3,6,7,8-HXCDF	Q J	0.15	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.88	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.20	5.2	MRL	ng/kg	
	OCDF	J	5.3	10	MRL	ng/kg	
SL-581-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	2.0	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.78	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	1.0	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	2.7	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.89	5.0	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	2.4	5.0	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDF	J	0.13	5.0	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.38	5.0	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.17	5.0	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.30	5.0	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.20	5.0	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.30	1.0	MRL	ng/kg	
SL-583-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	2.2	5.1	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	Q J	0.19	5.1	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.24	5.1	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.14	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.52	5.1	MRL	ng/kg	J (all detects)
	1,2,3,6,7,8-HXCDF	Q J	0.12	5.1	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.68	5.1	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.22	5.1	MRL	ng/kg	
	OCDF	J	3.3	10	MRL	ng/kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-35982-2 **Laboratory: TA DEN**

EDD Filename: 280-35982-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-606-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	4.7	5.1	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	2.8	5.1	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	2.7	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	2.6	5.1	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.29	5.1	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.99	5.1	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.43	5.1	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	1.0	5.1	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.55	5.1	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.52	1.0	MRL	ng/kg	
SL-638-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	2.1	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	1.6	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	4.2	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	4.3	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	1.7	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	3.4	5.2	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDF	Q J	0.28	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.91	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	1.1	5.2	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	2.5	5.2	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	1.8	5.2	MRL	ng/kg	
SL-640-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	1.6	5.1	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	Q J	0.47	5.1	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.27	5.1	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.47	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	Q J	0.70	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.32	5.1	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.75	5.1	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.39	5.1	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q J	0.25	5.1	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.30	5.1	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.30	5.1	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.58	1.0	MRL	ng/kg	
	OCDF	J	2.2	10	MRL	ng/kg	

SAMPLE DELIVERY GROUP

280-36026-1

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-3	N	3546	8270C SIM	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-3	N	3550C	8015B EFH	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-4	N	3050B	6010C	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-4	N	3050B	6020A	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-4	N	3546	8081B	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-4	N	3546	8082A	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-4	N	7471B	7471B	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-4	N	8151A	8151A	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5MS	280-36026-4MS	MS	3546	8081B	III
16-Nov-2012	SL-645-SA6-SB-0.0-0.5MSD	280-36026-4MSD	MSD	3546	8081B	III
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-5	N	3546	8270C SIM	III
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-5	N	3550C	8015B EFH	III
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-6	N	3050B	6010C	III
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-6	N	3050B	6020A	III
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-6	N	3546	8081B	III
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-6	N	3546	8082A	III
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-6	N	7471B	7471B	III
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-6	N	8151A	8151A	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5	280-36026-1	N	3546	8270C SIM	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5	280-36026-1	N	3550C	8015B EFH	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5	280-36026-2	N	3050B	6010C	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5	280-36026-2	N	3050B	6020A	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5	280-36026-2	N	3546	8082A	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5	280-36026-2	N	7471B	7471B	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5MS	280-36026-2MS	MS	3546	8082A	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5MS	280-36026-2MS	MS	7471B	7471B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Nov-2012	SL-639-SA6-SB-0.0-0.5MSD	280-36026-2MSD	MSD	3546	8082A	III
16-Nov-2012	SL-639-SA6-SB-0.0-0.5MSD	280-36026-2MSD	MSD	7471B	7471B	III
16-Nov-2012	SL-528-SA6-SB-0.0-0.5	280-36026-10	N	3050B	6010C	III
16-Nov-2012	SL-528-SA6-SB-0.0-0.5	280-36026-10	N	3050B	6020A	III
16-Nov-2012	SL-528-SA6-SB-0.0-0.5	280-36026-10	N	3546	8082A	III
16-Nov-2012	SL-528-SA6-SB-0.0-0.5	280-36026-10	N	7471B	7471B	III
16-Nov-2012	SL-528-SA6-SB-0.0-0.5	280-36026-9	N	3546	8270C SIM	III
16-Nov-2012	SL-528-SA6-SB-0.0-0.5	280-36026-9	N	3550C	8015B EFH	III
16-Nov-2012	SL-527-SA6-SB-0.0-0.5	280-36026-7	N	3546	8270C SIM	III
16-Nov-2012	SL-527-SA6-SB-0.0-0.5	280-36026-7	N	3550C	8015B EFH	III
16-Nov-2012	SL-527-SA6-SB-0.0-0.5	280-36026-8	N	3050B	6010C	III
16-Nov-2012	SL-527-SA6-SB-0.0-0.5	280-36026-8	N	3050B	6020A	III
16-Nov-2012	SL-527-SA6-SB-0.0-0.5	280-36026-8	N	3546	8082A	III
16-Nov-2012	SL-527-SA6-SB-0.0-0.5	280-36026-8	N	7471B	7471B	III
16-Nov-2012	SL-530-SA6-SB-0.0-0.5	280-36026-11	N	3546	8270C SIM	III
16-Nov-2012	SL-530-SA6-SB-0.0-0.5	280-36026-11	N	3550C	8015B EFH	III
16-Nov-2012	SL-530-SA6-SB-0.0-0.5	280-36026-12	N	3050B	6010C	III
16-Nov-2012	SL-530-SA6-SB-0.0-0.5	280-36026-12	N	3050B	6020A	III
16-Nov-2012	SL-530-SA6-SB-0.0-0.5	280-36026-12	N	3546	8082A	III
16-Nov-2012	SL-530-SA6-SB-0.0-0.5	280-36026-12	N	7471B	7471B	III
16-Nov-2012	SL-530-SA6-SB-0.0-0.5MS	280-36026-12MS	MS	3050B	6010C	III
16-Nov-2012	SL-530-SA6-SB-0.0-0.5MSD	280-36026-12MSD	MSD	3050B	6010C	III
16-Nov-2012	EB-111612	280-36026-13	EB	3510C	8081B	III
16-Nov-2012	EB-111612	280-36026-13	EB	8151A	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*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-527-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:50:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	0.89	J B	0.34	MDL	8.4	MRL	mg/Kg	UJ	Q, B, B

Sample ID: SL-527-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	2.8	J	0.95	MDL	9.4	MRL	mg/Kg	U	F
LITHIUM	21	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	290	J	0.097	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	3600	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	82	J	57	MDL	490	MRL	mg/Kg	J	Z
TIN	1.5	J	0.89	MDL	11	MRL	mg/Kg	J	Z

Sample ID: SL-528-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:00:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	0.76	J B	0.33	MDL	8.1	MRL	mg/Kg	UJ	Q, B, B

Sample ID: SL-528-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	1.2	J	0.92	MDL	9.1	MRL	mg/Kg	U	F
LITHIUM	22	J	0.28	MDL	35	MRL	mg/Kg	J	Z
MANGANESE	260	J	0.094	MDL	470	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	39	MDL	6000	MRL	mg/Kg	J	Z
SODIUM	78	J	56	MDL	470	MRL	mg/Kg	J	Z
TIN	1.6	J	0.86	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.0	J B	0.34	MDL	8.4	MRL	mg/Kg	UJ	Q, B, B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	1.6	J	0.95	MDL	9.4	MRL	mg/Kg	U	F
LITHIUM	21	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	270	J	0.097	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	3000	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	92	J	57	MDL	490	MRL	mg/Kg	J	Z
TIN	1.5	J	0.89	MDL	11	MRL	mg/Kg	J	Z

Sample ID: SL-639-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 9:30:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.1	J B	0.32	MDL	7.7	MRL	mg/Kg	UJ	Q, B, B

Sample ID: SL-639-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 9:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	1.5	J	0.88	MDL	8.7	MRL	mg/Kg	U	F
LITHIUM	21	J	0.27	MDL	33	MRL	mg/Kg	J	Z
MANGANESE	250	J	0.090	MDL	440	MRL	mg/Kg	J	Z
POTASSIUM	3400	J	37	MDL	5800	MRL	mg/Kg	J	Z
SODIUM	90	J	53	MDL	450	MRL	mg/Kg	J	Z
TIN	1.6	J	0.82	MDL	9.8	MRL	mg/Kg	J	Z

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 7:55:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	0.51	J B	0.30	MDL	7.3	MRL	mg/Kg	UJ	Q, B, B

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 7:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	9000	J	1.3	MDL	17000	MRL	mg/Kg	J	Z
BORON	1.1	J	0.83	MDL	8.3	MRL	mg/Kg	U	F
LITHIUM	20	J	0.26	MDL	31	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 7:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	240	J	0.085	MDL	420	MRL	mg/Kg	J	Z
POTASSIUM	3100	J	35	MDL	5400	MRL	mg/Kg	J	Z
SODIUM	70	J	50	MDL	430	MRL	mg/Kg	U	F
TIN	1.2	J	0.78	MDL	9.3	MRL	mg/Kg	J	Z

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 8:25:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	0.89	J B	0.33	MDL	7.9	MRL	mg/Kg	UJ	Q, B, B

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 8:25:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	2.0	J	0.90	MDL	8.9	MRL	mg/Kg	U	F
LITHIUM	27	J	0.28	MDL	34	MRL	mg/Kg	J	Z
MANGANESE	330	J	0.092	MDL	460	MRL	mg/Kg	J	Z
POTASSIUM	3900	J	38	MDL	5900	MRL	mg/Kg	J	Z
SODIUM	84	J	54	MDL	460	MRL	mg/Kg	J	Z
TIN	1.4	J	0.84	MDL	10	MRL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-527-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.018	J	0.013	MDL	8.4	MRL	mg/Kg	J	Z, Q
ARSENIC	3.3	J	0.049	MDL	14	MRL	mg/Kg	J	Z
BARIUM	75	J	0.068	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.36	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.47	J	0.0090	MDL	0.96	MRL	mg/Kg	J	Z
CHROMIUM	14	J	0.073	MDL	35	MRL	mg/Kg	J	Z
COBALT	4.7	J	0.0064	MDL	20	MRL	mg/Kg	J	Z
COPPER	6.6	J B	0.069	MDL	28	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-527-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	8.0	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.36	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	8.9	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SELENIUM	0.72	B	0.13	MDL	0.63	MRL	mg/Kg	U	B
SILVER	0.045	J	0.020	MDL	0.76	MRL	mg/Kg	U	F
THALLIUM	0.22	J	0.0034	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	26	J	0.037	MDL	60	MRL	mg/Kg	J	Z
ZINC	51	J	0.30	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-528-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.025	J	0.014	MDL	8.6	MRL	mg/Kg	J	Z, Q
ARSENIC	3.9	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	64	J	0.070	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.39	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.15	J	0.0092	MDL	0.99	MRL	mg/Kg	J	Z
CHROMIUM	13	J	0.075	MDL	36	MRL	mg/Kg	J	Z
COBALT	4.5	J	0.0065	MDL	21	MRL	mg/Kg	J	Z
COPPER	5.7	J B	0.070	MDL	29	MRL	mg/Kg	J	Z
LEAD	9.7	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.017	MDL	5.2	MRL	mg/Kg	J	Z
NICKEL	7.9	J	0.025	MDL	29	MRL	mg/Kg	J	Z
SELENIUM	0.79	B	0.13	MDL	0.65	MRL	mg/Kg	U	B
SILVER	0.032	J	0.020	MDL	0.78	MRL	mg/Kg	U	F
THALLIUM	0.24	J	0.0035	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	26	J	0.038	MDL	61	MRL	mg/Kg	J	Z

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.019	J	0.013	MDL	7.9	MRL	mg/Kg	J	Z, Q
ARSENIC	4.7	J	0.046	MDL	14	MRL	mg/Kg	J	Z
BARIUM	80	J	0.064	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.69	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.25	J	0.0086	MDL	0.91	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.069	MDL	34	MRL	mg/Kg	J	Z
COBALT	5.4	J	0.0061	MDL	19	MRL	mg/Kg	J	Z
COPPER	8.1	J B	0.065	MDL	26	MRL	mg/Kg	J	Z
LEAD	8.8	J	0.017	MDL	31	MRL	mg/Kg	J	Z
MOLYBDENUM	0.45	J	0.016	MDL	4.8	MRL	mg/Kg	J	Z
NICKEL	11	J	0.023	MDL	26	MRL	mg/Kg	J	Z
SELENIUM	0.90	B	0.12	MDL	0.60	MRL	mg/Kg	U	B
SILVER	0.049	J	0.019	MDL	0.72	MRL	mg/Kg	U	F
THALLIUM	0.26	J	0.0032	MDL	0.42	MRL	mg/Kg	J	Z
VANADIUM	29	J	0.035	MDL	57	MRL	mg/Kg	J	Z
ZINC	55	J	0.29	MDL	100	MRL	mg/Kg	J	Z

Sample ID: SL-639-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 9:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.028	J	0.013	MDL	8.2	MRL	mg/Kg	J	Z, Q
ARSENIC	4.1	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	77	J	0.066	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.56	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.46	J	0.0088	MDL	0.94	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.071	MDL	35	MRL	mg/Kg	J	Z
COBALT	5.1	J	0.0062	MDL	20	MRL	mg/Kg	J	Z
COPPER	9.5	J B	0.067	MDL	27	MRL	mg/Kg	J	Z
LEAD	14	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.36	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	9.6	J	0.024	MDL	27	MRL	mg/Kg	J	Z
SELENIUM	0.80	B	0.13	MDL	0.62	MRL	mg/Kg	U	B
SILVER	0.079	J	0.019	MDL	0.74	MRL	mg/Kg	U	F
THALLIUM	0.24	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z
VANADIUM	28	J	0.036	MDL	58	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 7:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.021	J	0.013	MDL	8.0	MRL	mg/Kg	J	Z, Q
ARSENIC	4.6	J	0.047	MDL	14	MRL	mg/Kg	J	Z
BARIUM	62	J	0.065	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.37	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.15	J	0.0086	MDL	0.92	MRL	mg/Kg	J	Z
CHROMIUM	12	J	0.070	MDL	34	MRL	mg/Kg	J	Z
COBALT	4.0	J	0.0061	MDL	19	MRL	mg/Kg	J	Z
COPPER	5.2	J B	0.065	MDL	27	MRL	mg/Kg	J	Z
LEAD	6.8	J	0.017	MDL	31	MRL	mg/Kg	J	Z
MOLYBDENUM	0.44	J	0.016	MDL	4.9	MRL	mg/Kg	J	Z
NICKEL	7.8	J	0.023	MDL	27	MRL	mg/Kg	J	Z
SELENIUM	0.56	J B	0.12	MDL	0.60	MRL	mg/Kg	U	B
SILVER	0.067	J	0.019	MDL	0.73	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0032	MDL	0.42	MRL	mg/Kg	J	Z
VANADIUM	20	J	0.035	MDL	57	MRL	mg/Kg	J	Z
ZINC	48	J	0.29	MDL	100	MRL	mg/Kg	J	Z

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 8:25:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.033	J	0.013	MDL	8.3	MRL	mg/Kg	J	Z, Q
ARSENIC	4.0	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	96	J	0.067	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.71	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.32	J	0.0090	MDL	0.95	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.073	MDL	35	MRL	mg/Kg	J	Z
COBALT	5.8	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	7.9	J B	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	13	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.45	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	11	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SELENIUM	0.69	B	0.13	MDL	0.62	MRL	mg/Kg	U	B
SILVER	0.11	J	0.019	MDL	0.75	MRL	mg/Kg	U	F
THALLIUM	0.26	J	0.0033	MDL	0.44	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 8:25:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	27	J	0.037	MDL	59	MRL	mg/Kg	J	Z
ZINC	63	J	0.30	MDL	100	MRL	mg/Kg	J	Z

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-528-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.013	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.017	J	0.0057	MDL	0.020	MRL	mg/Kg	J	Z

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 7:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0086	J	0.0062	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 8:25:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.022	J	0.0065	MDL	0.024	MRL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-527-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	2.1	J	0.95	MDL	4.8	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-528-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	1.2	J	0.96	MDL	4.8	MRL	mg/Kg	J	Z

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	4.2	J	0.96	MDL	4.8	MRL	mg/Kg	J	Z

Sample ID: SL-639-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 9:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	2.6	J	1.9	MDL	9.4	MRL	mg/Kg	J	Z, S
EFH(C21-C30)	22		1.9	MDL	9.4	MRL	mg/Kg	J	S
EFH(C30-C40)	76		1.9	MDL	19	MRL	mg/Kg	J	S
TOTAL EFH(C8-C40)	89	B	1.3	MDL	7.5	MRL	mg/Kg	J	S

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 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
EFH(C15-C20)	3.5	J	0.95	MDL	4.7	MRL	mg/Kg	J	Z

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 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
EFH(C21-C30)	3.3	J	0.93	MDL	4.6	MRL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081B **Matrix: SO**

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 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'-DDE	0.42	J	0.23	MDL	3.2	MRL	ug/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8081B **Matrix: SO**

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 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
4,4'-DDE	0.70	J	0.23	MDL	3.2	MRL	ug/Kg	J	Z
4,4'-DDT	1.1	J	0.57	MDL	3.2	MRL	ug/Kg	J	Z
METHOXYCHLOR	0.66	J p	0.43	MDL	6.5	MRL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-527-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.5	J	0.26	MDL	9.9	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.31	MDL	9.9	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.72	J	0.17	MDL	9.9	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.7	J	1.2	MDL	9.9	MRL	ug/Kg	J	Z
CHRYSENE	4.8	J	0.99	MDL	9.9	MRL	ug/Kg	J	Z
FLUORANTHENE	2.6	J	0.99	MDL	9.9	MRL	ug/Kg	J	Z
FLUORENE	1.4	J	0.46	MDL	9.9	MRL	ug/Kg	J	Z
NAPHTHALENE	5.2	J	0.32	MDL	9.9	MRL	ug/Kg	J	Z
PHENANTHRENE	4.3	J	1.1	MDL	9.9	MRL	ug/Kg	J	Z

Sample ID: SL-528-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.56	J	0.26	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.99	J	0.31	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.56	J	0.17	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.90	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	J	0.74	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.1	J	1.2	MDL	10	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.8	J	1.1	MDL	10	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	1.0	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	3.4	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	3.5	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	0.85	J	0.47	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-528-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	1.6	J	1.1	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	1.7	J	0.33	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	3.0	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.33	J	0.26	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.55	J	0.31	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	1.0	J	0.17	MDL	10	MRL	ug/Kg	J	Z
ANTHRACENE	1.8	J	0.73	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	5.2	J	0.91	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	4.4	J	0.75	MDL	10	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.1	J	1.1	MDL	10	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	6.3	J	1.0	MDL	10	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.3	J	1.3	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	0.50	J	0.48	MDL	10	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.3	J	1.1	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.33	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	5.1	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: SL-639-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.41	J	0.25	MDL	9.4	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.60	J	0.29	MDL	9.4	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.97	J	0.16	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	2.9	J	0.85	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	2.3	J	0.70	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	5.5	J	1.1	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	5.1	J	1.0	MDL	9.4	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	2.0	J	0.94	MDL	9.4	MRL	ug/Kg	J	Z
FLUORANTHENE	8.0	J	0.94	MDL	9.4	MRL	ug/Kg	J	Z
FLUORENE	2.1	J	0.44	MDL	9.4	MRL	ug/Kg	J	Z
NAPHTHALENE	0.83	J	0.31	MDL	9.4	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-639-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	9.0	J	1.0	MDL	9.4	MRL	ug/Kg	J	Z
PYRENE	6.0	J	1.0	MDL	9.4	MRL	ug/Kg	J	Z

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 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
1-METHYLNAPHTHALENE	0.44	J	0.26	MDL	9.8	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.83	J	0.30	MDL	9.8	MRL	ug/Kg	J	Z
ACENAPHTHENE	0.87	J	0.16	MDL	9.8	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.39	J	0.17	MDL	9.8	MRL	ug/Kg	J	Z
ANTHRACENE	3.5	J	0.71	MDL	9.8	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	8.2	J	1.1	MDL	9.8	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.7	J	0.98	MDL	9.8	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.8	J	1.3	MDL	9.8	MRL	ug/Kg	J	Z
FLUORENE	0.95	J	0.46	MDL	9.8	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	8.9	J	1.1	MDL	9.8	MRL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.32	MDL	9.8	MRL	ug/Kg	J	Z

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 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
2-METHYLNAPHTHALENE	0.37	J	0.31	MDL	9.9	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.26	J	0.17	MDL	9.9	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.8	J	1.2	MDL	9.9	MRL	ug/Kg	J	Z
CHRYSENE	2.0	J	0.99	MDL	9.9	MRL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.99	MDL	9.9	MRL	ug/Kg	J	Z
NAPHTHALENE	0.88	J	0.32	MDL	9.9	MRL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	1.1	MDL	9.9	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Matrix Spike Precision
F	Equipment Blank Contamination
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36026-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148526/9-A	11/26/2012 10:08:00 PM	IRON STRONTIUM Zirconium	10.2 mg/Kg 0.0450 mg/Kg 0.469 mg/Kg	SL-527-SA6-SB-0.0-0.5 SL-528-SA6-SB-0.0-0.5 SL-530-SA6-SB-0.0-0.5 SL-639-SA6-SB-0.0-0.5 SL-645-SA6-SB-0.0-0.5 SL-646-SA6-SB-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-527-SA6-SB-0.0-0.5(RE2/TOT)	Zirconium	0.89 mg/Kg	0.89U mg/Kg
SL-528-SA6-SB-0.0-0.5(RE2/TOT)	Zirconium	0.76 mg/Kg	0.76U mg/Kg
SL-530-SA6-SB-0.0-0.5(RE2/TOT)	Zirconium	1.0 mg/Kg	1.0U mg/Kg
SL-639-SA6-SB-0.0-0.5(RE2/TOT)	Zirconium	1.1 mg/Kg	1.1U mg/Kg
SL-645-SA6-SB-0.0-0.5(RE2/TOT)	Zirconium	0.51 mg/Kg	0.51U mg/Kg
SL-646-SA6-SB-0.0-0.5(RE2/TOT)	Zirconium	0.89 mg/Kg	0.89U mg/Kg

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148542/1-A	11/23/2012 9:08:00 PM	COPPER SELENIUM	0.0808 mg/Kg 0.182 mg/Kg	SL-527-SA6-SB-0.0-0.5 SL-528-SA6-SB-0.0-0.5 SL-530-SA6-SB-0.0-0.5 SL-639-SA6-SB-0.0-0.5 SL-645-SA6-SB-0.0-0.5 SL-646-SA6-SB-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-527-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.72 mg/Kg	0.72U mg/Kg
SL-528-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.79 mg/Kg	0.79U mg/Kg
SL-530-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.90 mg/Kg	0.90U mg/Kg
SL-639-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.80 mg/Kg	0.80U mg/Kg
SL-645-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.56 mg/Kg	0.56U mg/Kg
SL-646-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.69 mg/Kg	0.69U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **8015B EFH**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148519/1-A	11/23/2012 5:10:00 PM	TOTAL EFH(C8-C40)	0.870 mg/Kg	SL-527-SA6-SB-0.0-0.5 SL-528-SA6-SB-0.0-0.5 SL-530-SA6-SB-0.0-0.5 SL-639-SA6-SB-0.0-0.5 SL-645-SA6-SB-0.0-0.5 SL-646-SA6-SB-0.0-0.5

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-111512(RES/TOT)	11/15/2012 3:00:00 PM	BORON SODIUM	0.035 mg/L 0.15 mg/L	SL-527-SA6-SB-0.0-0.5 SL-528-SA6-SB-0.0-0.5 SL-530-SA6-SB-0.0-0.5 SL-639-SA6-SB-0.0-0.5 SL-645-SA6-SB-0.0-0.5 SL-646-SA6-SB-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-527-SA6-SB-0.0-0.5(RES/TOT)	BORON	2.8 mg/Kg	2.8U mg/Kg
SL-528-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.2 mg/Kg	1.2U mg/Kg
SL-530-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.6 mg/Kg	1.6U mg/Kg
SL-639-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.5 mg/Kg	1.5U mg/Kg
SL-645-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.1 mg/Kg	1.1U mg/Kg
SL-645-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	70 mg/Kg	70U mg/Kg
SL-646-SA6-SB-0.0-0.5(RES/TOT)	BORON	2.0 mg/Kg	2.0U mg/Kg

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-111512(RES/TOT)	11/15/2012 3:00:00 PM	SILVER	0.00043 mg/L	SL-527-SA6-SB-0.0-0.5 SL-528-SA6-SB-0.0-0.5 SL-530-SA6-SB-0.0-0.5 SL-639-SA6-SB-0.0-0.5 SL-645-SA6-SB-0.0-0.5 SL-646-SA6-SB-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-527-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.045 mg/Kg	0.045U mg/Kg
SL-528-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.032 mg/Kg	0.032U mg/Kg
SL-530-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.049 mg/Kg	0.049U mg/Kg
SL-639-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.079 mg/Kg	0.079U mg/Kg
SL-645-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.067 mg/Kg	0.067U mg/Kg
SL-646-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.11 mg/Kg	0.11U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-530-SA6-SB-0.0-0.5MS (TOT) SL-530-SA6-SB-0.0-0.5MSD (TOT) (SL-527-SA6-SB-0.0-0.5 SL -528-SA6-SB-0.0-0.5 SL -530-SA6-SB-0.0-0.5 SL -639-SA6-SB-0.0-0.5 SL -645-SA6-SB-0.0-0.5 SL -646-SA6-SB-0.0-0.5)	ALUMINUM TITANIUM	2214 152	1953 135	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	No Qual, >4x
SL-530-SA6-SB-0.0-0.5MS (TOT) SL-530-SA6-SB-0.0-0.5MSD (TOT) (SL-527-SA6-SB-0.0-0.5 SL -528-SA6-SB-0.0-0.5 SL -530-SA6-SB-0.0-0.5 SL -639-SA6-SB-0.0-0.5 SL -645-SA6-SB-0.0-0.5 SL -646-SA6-SB-0.0-0.5)	IRON	383	-126	75.00-125.00	-	IRON	No Qual, >4x
SL-530-SA6-SB-0.0-0.5MS (TOT) SL-530-SA6-SB-0.0-0.5MSD (TOT) (SL-527-SA6-SB-0.0-0.5 SL -528-SA6-SB-0.0-0.5 SL -530-SA6-SB-0.0-0.5 SL -639-SA6-SB-0.0-0.5 SL -645-SA6-SB-0.0-0.5 SL -646-SA6-SB-0.0-0.5)	MANGANESE Zirconium	- 74	61 -	75.00-125.00 75.00-125.00	- -	MANGANESE Zirconium	J(all detects) UJ(all non-detects) Mn, No Qual, >4x

Method: 8081B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-645-SA6-SB-0.0-0.5MSD (SL-645-SA6-SB-0.0-0.5)	4,4'-DDE ENDOSULFAN II	- -	- -	58.00-121.00 71.00-118.00	18 (15.00) 21 (20.00)	4,4'-DDE ENDOSULFAN II	J(all detects)

Method: 8082A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-639-SA6-SB-0.0-0.5MS (SL-639-SA6-SB-0.0-0.5)	AROCLOR 1016	133	-	54.00-132.00	-	AROCLOR 1016, 1224, 1232	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B EFH
Matrix: SO

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-639-SA6-SB-0.0 -0.5	O-TERPHENYL	156	49.00-115.00	All Target Analytes	J (all detects)

Method: 8151A
Matrix: SO

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-645-SA6-SB-0.0 -0.5	2,4-Dichlorophenylacetic acid	28	50.00-150.00	All Target Analytes	No Qual Diluted Out
SL-646-SA6-SB-0.0 -0.5	2,4-Dichlorophenylacetic acid	-100	50.00-150.00	All Target Analytes	No Qual, Diluted Out

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-527-SA6-SB-0.0-0.5	ALUMINUM	J	12000	19000	MRL	mg/Kg	J (all detects)
	BORON	J	2.8	9.4	MRL	mg/Kg	
	LITHIUM	J	21	36	MRL	mg/Kg	
	MANGANESE	J	290	480	MRL	mg/Kg	
	POTASSIUM	J	3600	6200	MRL	mg/Kg	
	SODIUM	J	82	490	MRL	mg/Kg	
	TIN	J	1.5	11	MRL	mg/Kg	
	Zirconium	J B	0.89	8.4	MRL	mg/Kg	
SL-528-SA6-SB-0.0-0.5	ALUMINUM	J	11000	19000	MRL	mg/Kg	J (all detects)
	BORON	J	1.2	9.1	MRL	mg/Kg	
	LITHIUM	J	22	35	MRL	mg/Kg	
	MANGANESE	J	260	470	MRL	mg/Kg	
	POTASSIUM	J	2700	6000	MRL	mg/Kg	
	SODIUM	J	78	470	MRL	mg/Kg	
	TIN	J	1.6	10	MRL	mg/Kg	
	Zirconium	J B	0.76	8.1	MRL	mg/Kg	
SL-530-SA6-SB-0.0-0.5	ALUMINUM	J	14000	19000	MRL	mg/Kg	J (all detects)
	BORON	J	1.6	9.4	MRL	mg/Kg	
	LITHIUM	J	21	36	MRL	mg/Kg	
	MANGANESE	J	270	480	MRL	mg/Kg	
	POTASSIUM	J	3000	6200	MRL	mg/Kg	
	SODIUM	J	92	490	MRL	mg/Kg	
	TIN	J	1.5	11	MRL	mg/Kg	
	Zirconium	J B	1.0	8.4	MRL	mg/Kg	
SL-639-SA6-SB-0.0-0.5	ALUMINUM	J	12000	18000	MRL	mg/Kg	J (all detects)
	BORON	J	1.5	8.7	MRL	mg/Kg	
	LITHIUM	J	21	33	MRL	mg/Kg	
	MANGANESE	J	250	440	MRL	mg/Kg	
	POTASSIUM	J	3400	5800	MRL	mg/Kg	
	SODIUM	J	90	450	MRL	mg/Kg	
	TIN	J	1.6	9.8	MRL	mg/Kg	
	Zirconium	J B	1.1	7.7	MRL	mg/Kg	
SL-645-SA6-SB-0.0-0.5	ALUMINUM	J	9000	17000	MRL	mg/Kg	J (all detects)
	BORON	J	1.1	8.3	MRL	mg/Kg	
	LITHIUM	J	20	31	MRL	mg/Kg	
	MANGANESE	J	240	420	MRL	mg/Kg	
	POTASSIUM	J	3100	5400	MRL	mg/Kg	
	SODIUM	J	70	430	MRL	mg/Kg	
	TIN	J	1.2	9.3	MRL	mg/Kg	
	Zirconium	J B	0.51	7.3	MRL	mg/Kg	
SL-646-SA6-SB-0.0-0.5	ALUMINUM	J	13000	18000	MRL	mg/Kg	J (all detects)
	BORON	J	2.0	8.9	MRL	mg/Kg	
	LITHIUM	J	27	34	MRL	mg/Kg	
	MANGANESE	J	330	460	MRL	mg/Kg	
	POTASSIUM	J	3900	5900	MRL	mg/Kg	
	SODIUM	J	84	460	MRL	mg/Kg	
	TIN	J	1.4	10	MRL	mg/Kg	
	Zirconium	J B	0.89	7.9	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-527-SA6-SB-0.0-0.5	ANTIMONY	J	0.018	8.4	MRL	mg/Kg	
	ARSENIC	J	3.3	14	MRL	mg/Kg	
	BARIUM	J	75	130	MRL	mg/Kg	
	BERYLLIUM	J	0.36	1.1	MRL	mg/Kg	
	CADMIUM	J	0.47	0.96	MRL	mg/Kg	
	CHROMIUM	J	14	35	MRL	mg/Kg	
	COBALT	J	4.7	20	MRL	mg/Kg	
	COPPER	J B	6.6	28	MRL	mg/Kg	J (all detects)
	LEAD	J	8.0	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.36	5.1	MRL	mg/Kg	
	NICKEL	J	8.9	28	MRL	mg/Kg	
	SILVER	J	0.045	0.76	MRL	mg/Kg	
	THALLIUM	J	0.22	0.44	MRL	mg/Kg	
	VANADIUM	J	26	60	MRL	mg/Kg	
	ZINC	J	51	110	MRL	mg/Kg	
SL-528-SA6-SB-0.0-0.5	ANTIMONY	J	0.025	8.6	MRL	mg/Kg	
	ARSENIC	J	3.9	15	MRL	mg/Kg	
	BARIUM	J	64	140	MRL	mg/Kg	
	BERYLLIUM	J	0.39	1.1	MRL	mg/Kg	
	CADMIUM	J	0.15	0.99	MRL	mg/Kg	
	CHROMIUM	J	13	36	MRL	mg/Kg	
	COBALT	J	4.5	21	MRL	mg/Kg	
	COPPER	J B	5.7	29	MRL	mg/Kg	J (all detects)
	LEAD	J	9.7	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	5.2	MRL	mg/Kg	
	NICKEL	J	7.9	29	MRL	mg/Kg	
	SILVER	J	0.032	0.78	MRL	mg/Kg	
	THALLIUM	J	0.24	0.45	MRL	mg/Kg	
	VANADIUM	J	26	61	MRL	mg/Kg	
SL-530-SA6-SB-0.0-0.5	ANTIMONY	J	0.019	7.9	MRL	mg/Kg	
	ARSENIC	J	4.7	14	MRL	mg/Kg	
	BARIUM	J	80	130	MRL	mg/Kg	
	BERYLLIUM	J	0.69	1.0	MRL	mg/Kg	
	CADMIUM	J	0.25	0.91	MRL	mg/Kg	
	CHROMIUM	J	15	34	MRL	mg/Kg	
	COBALT	J	5.4	19	MRL	mg/Kg	
	COPPER	J B	8.1	26	MRL	mg/Kg	J (all detects)
	LEAD	J	8.8	31	MRL	mg/Kg	
	MOLYBDENUM	J	0.45	4.8	MRL	mg/Kg	
	NICKEL	J	11	26	MRL	mg/Kg	
	SILVER	J	0.049	0.72	MRL	mg/Kg	
	THALLIUM	J	0.26	0.42	MRL	mg/Kg	
	VANADIUM	J	29	57	MRL	mg/Kg	
	ZINC	J	55	100	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-639-SA6-SB-0.0-0.5	ANTIMONY	J	0.028	8.2	MRL	mg/Kg	
	ARSENIC	J	4.1	14	MRL	mg/Kg	
	BARIUM	J	77	130	MRL	mg/Kg	
	BERYLLIUM	J	0.56	1.0	MRL	mg/Kg	
	CADMIUM	J	0.46	0.94	MRL	mg/Kg	
	CHROMIUM	J	15	35	MRL	mg/Kg	
	COBALT	J	5.1	20	MRL	mg/Kg	
	COPPER	J B	9.5	27	MRL	mg/Kg	J (all detects)
	LEAD	J	14	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.36	5.0	MRL	mg/Kg	
	NICKEL	J	9.6	27	MRL	mg/Kg	
	SILVER	J	0.079	0.74	MRL	mg/Kg	
	THALLIUM	J	0.24	0.43	MRL	mg/Kg	
	VANADIUM	J	28	58	MRL	mg/Kg	
SL-645-SA6-SB-0.0-0.5	ANTIMONY	J	0.021	8.0	MRL	mg/Kg	
	ARSENIC	J	4.6	14	MRL	mg/Kg	
	BARIUM	J	62	130	MRL	mg/Kg	
	BERYLLIUM	J	0.37	1.0	MRL	mg/Kg	
	CADMIUM	J	0.15	0.92	MRL	mg/Kg	
	CHROMIUM	J	12	34	MRL	mg/Kg	
	COBALT	J	4.0	19	MRL	mg/Kg	
	COPPER	J B	5.2	27	MRL	mg/Kg	
	LEAD	J	6.8	31	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.44	4.9	MRL	mg/Kg	
	NICKEL	J	7.8	27	MRL	mg/Kg	
	SELENIUM	J B	0.56	0.60	MRL	mg/Kg	
	SILVER	J	0.067	0.73	MRL	mg/Kg	
	THALLIUM	J	0.23	0.42	MRL	mg/Kg	
	VANADIUM	J	20	57	MRL	mg/Kg	
	ZINC	J	48	100	MRL	mg/Kg	
SL-646-SA6-SB-0.0-0.5	ANTIMONY	J	0.033	8.3	MRL	mg/Kg	
	ARSENIC	J	4.0	14	MRL	mg/Kg	
	BARIUM	J	96	130	MRL	mg/Kg	
	BERYLLIUM	J	0.71	1.0	MRL	mg/Kg	
	CADMIUM	J	0.32	0.95	MRL	mg/Kg	
	CHROMIUM	J	15	35	MRL	mg/Kg	
	COBALT	J	5.8	20	MRL	mg/Kg	
	COPPER	J B	7.9	28	MRL	mg/Kg	J (all detects)
	LEAD	J	13	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.45	5.1	MRL	mg/Kg	
	NICKEL	J	11	28	MRL	mg/Kg	
	SILVER	J	0.11	0.75	MRL	mg/Kg	
	THALLIUM	J	0.26	0.44	MRL	mg/Kg	
	VANADIUM	J	27	59	MRL	mg/Kg	
	ZINC	J	63	100	MRL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-528-SA6-SB-0.0-0.5	MERCURY	J	0.013	0.023	MRL	mg/Kg	J (all detects)

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-530-SA6-SB-0.0-0.5	MERCURY	J	0.017	0.020	MRL	mg/Kg	J (all detects)
SL-645-SA6-SB-0.0-0.5	MERCURY	J	0.0086	0.023	MRL	mg/Kg	J (all detects)
SL-646-SA6-SB-0.0-0.5	MERCURY	J	0.022	0.024	MRL	mg/Kg	J (all detects)

Method: 8015B EFH
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-527-SA6-SB-0.0-0.5	EFH(C15-C20)	J	2.1	4.8	MRL	mg/Kg	J (all detects)
SL-528-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.2	4.8	MRL	mg/Kg	J (all detects)
SL-530-SA6-SB-0.0-0.5	EFH(C21-C30)	J	4.2	4.8	MRL	mg/Kg	J (all detects)
SL-639-SA6-SB-0.0-0.5	EFH(C15-C20)	J	2.6	9.4	MRL	mg/Kg	J (all detects)
SL-645-SA6-SB-0.0-0.5	EFH(C15-C20)	J	3.5	4.7	MRL	mg/Kg	J (all detects)
SL-646-SA6-SB-0.0-0.5	EFH(C21-C30)	J	3.3	4.6	MRL	mg/Kg	J (all detects)

Method: 8081B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-645-SA6-SB-0.0-0.5	4,4'-DDE	J	0.42	3.2	MRL	ug/Kg	J (all detects)
SL-646-SA6-SB-0.0-0.5	4,4'-DDE	J	0.70	3.2	MRL	ug/Kg	
	4,4'-DDT	J	1.1	3.2	MRL	ug/Kg	J (all detects)
	METHOXYCHLOR	J p	0.66	6.5	MRL	ug/Kg	

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-527-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.5	9.9	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J	1.6	9.9	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.72	9.9	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	2.7	9.9	MRL	ug/Kg	
	CHRYSENE	J	4.8	9.9	MRL	ug/Kg	J (all detects)
	FLUORANTHENE	J	2.6	9.9	MRL	ug/Kg	
	FLUORENE	J	1.4	9.9	MRL	ug/Kg	
	NAPHTHALENE	J	5.2	9.9	MRL	ug/Kg	
	PHENANTHRENE	J	4.3	9.9	MRL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-528-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.56	10	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J	0.99	10	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.56	10	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.5	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	3.1	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.8	10	MRL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.1	10	MRL	ug/Kg	
	CHRYSENE	J	3.4	10	MRL	ug/Kg	
	FLUORANTHENE	J	3.5	10	MRL	ug/Kg	
	FLUORENE	J	0.85	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	10	MRL	ug/Kg	
	NAPHTHALENE	J	1.7	10	MRL	ug/Kg	
	PHENANTHRENE	J	3.0	10	MRL	ug/Kg	
SL-530-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.33	10	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J	0.55	10	MRL	ug/Kg	
	ACENAPHTHYLENE	J	1.0	10	MRL	ug/Kg	
	ANTHRACENE	J	1.8	10	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	5.2	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	4.4	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.1	10	MRL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	6.3	10	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	10	MRL	ug/Kg	
	FLUORENE	J	0.50	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	5.3	10	MRL	ug/Kg	
	NAPHTHALENE	J	1.2	10	MRL	ug/Kg	
	PHENANTHRENE	J	5.1	10	MRL	ug/Kg	
SL-639-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.41	9.4	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J	0.60	9.4	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.97	9.4	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	2.9	9.4	MRL	ug/Kg	
	BENZO(A)PYRENE	J	2.3	9.4	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	5.5	9.4	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	5.1	9.4	MRL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	2.0	9.4	MRL	ug/Kg	
	FLUORANTHENE	J	8.0	9.4	MRL	ug/Kg	
	FLUORENE	J	2.1	9.4	MRL	ug/Kg	
	NAPHTHALENE	J	0.83	9.4	MRL	ug/Kg	
	PHENANTHRENE	J	9.0	9.4	MRL	ug/Kg	
	PYRENE	J	6.0	9.4	MRL	ug/Kg	
SL-645-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.44	9.8	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J	0.83	9.8	MRL	ug/Kg	
	ACENAPHTHENE	J	0.87	9.8	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.39	9.8	MRL	ug/Kg	
	ANTHRACENE	J	3.5	9.8	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	8.2	9.8	MRL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	7.7	9.8	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.8	9.8	MRL	ug/Kg	
	FLUORENE	J	0.95	9.8	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	8.9	9.8	MRL	ug/Kg	
	NAPHTHALENE	J	1.2	9.8	MRL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36026-1 **Laboratory: TA DEN**

EDD Filename: 280-36026-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-646-SA6-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.37	9.9	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.26	9.9	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.8	9.9	MRL	ug/Kg	
	CHRYSENE	J	2.0	9.9	MRL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.0	9.9	MRL	ug/Kg	
	NAPHTHALENE	J	0.88	9.9	MRL	ug/Kg	
	PHENANTHRENE	J	1.1	9.9	MRL	ug/Kg	

LDC #: 29419P4
SDG #: 280-36026-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 7/12/13
Page: 1 of 1
Reviewer: CA
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/16/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D(9/10: Al, Fe, Mn, Ti, Zn)(6020A see 280-35982-1)
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	A	
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	SW	EB= EB-111512 (280-35982-1) FB= FB-060512 ~~FB= FB-111412 (280-35930-1)~~ (12F037)

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-639-SA6-SB-0.0-0.5	11		21		31	
2	SL-645-SA6-SB-0.0-0.5	12		22		32	
3	SL-646-SA6-SB-0.0-0.5	13		23		33	
4	SL-527-SA6-SB-0.0-0.5	14		24		34	
5	SL-528-SA6-SB-0.0-0.5	15		25		35	
6	SL-530-SA6-SB-0.0-0.5	16		26		36	
7	SL-639-SA6-SB-0.0-0.5MS (#5)	17		27		37	
8	SL-639-SA6-SB-0.0-0.5MSD	18		28		38	
9	SL-530-SA6-SB-0.0-0.5MS (6010)	19		29		39	
10	SL-530-SA6-SB-0.0-0.5MSD	20		30		40	

Notes: _____

LDC #: 29419P4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: 02
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-4

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1	2	3	4					
Zr			3.68	1.84	1.1	0.51	0.89	0.89					

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 5, 6

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	5	6							
Zr			6.22	3.11	0.76	1.0							

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.

LDC #: 29419P4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer: M

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/15/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All Soil

Analyte	Blank ID	Blank ID	Sample Identification										
	EB-111512 (SDG: 280-35982-1)	Action Limit	1	2	3	4	5	6					
B	0.035	17.5	1.5	1.1	2.0	2.8	1.2	1.6					
Na	0.15	75		70									
Ag	0.00043	0.215	0.079	0.067	0.11	0.045	0.032	0.049					

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 #: 29419P4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 6/05/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil (>5x)

Analyte	Blank ID	Sample Identification											
	FB-060512 (SDG: 12F037)	Action Limit											
Al	0.0270	13.5											
Ca	0.0263	13.15											
Cu	0.000954	0.477											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-36026-2

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Nov-2012	SL-645-SA6-SB-0.0-0.5	280-36026-4	N	1613	1613B	IV
16-Nov-2012	SL-646-SA6-SB-0.0-0.5	280-36026-6	N	1613	1613B	IV
16-Nov-2012	SL-639-SA6-SB-0.0-0.5	280-36026-2	N	1613	1613B	IV
16-Nov-2012	SL-528-SA6-SB-0.0-0.5	280-36026-10	N	1613	1613B	IV
16-Nov-2012	SL-527-SA6-SB-0.0-0.5	280-36026-8	N	1613	1613B	IV
16-Nov-2012	SL-530-SA6-SB-0.0-0.5	280-36026-12	N	1613	1613B	IV

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-2 **Laboratory: TA DEN**

EDD Filename: 280-36026-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-527-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.1	J	0.071	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	1.0	J	0.046	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.0	C J	0.034	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	1.2	Q J	0.033	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	3.3	J	0.043	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.089	Q J	0.040	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.56	Q J	0.077	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.14	J	0.058	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.61	J	0.033	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.17	Q J	0.053	MDL	5.2	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.23	J	0.072	MDL	1.0	MRL	ng/kg	J	Z

Sample ID: SL-528-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.0	J	0.049	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.72	Q J	0.039	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.073	Q J	0.040	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.080	J	0.027	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.40	J	0.045	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.11	J	0.029	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.57	J	0.040	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.18	Q J	0.065	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.11	J	0.026	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.083	Q J	0.035	MDL	5.2	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.13	Q J	0.069	MDL	1.0	MRL	ng/kg	J	Z
OCDF	0.96	S Q B J	0.042	MDL	10	MRL	ng/kg	J	Z

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.0	J	0.036	MDL	4.9	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-2 **Laboratory: TA DEN**

EDD Filename: 280-36026-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-530-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.18	Q J	0.051	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.15	Q J	0.039	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.16	Q J	0.032	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	1.1	J	0.041	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.21	J	0.030	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	1.4	J	0.038	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.069	Q J	0.034	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.12	Q J	0.047	MDL	4.9	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.088	J	0.029	MDL	4.9	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.056	Q J	0.039	MDL	4.9	MRL	ng/kg	J	Z
2,3,7,8-TCDD	0.050	Q J	0.10	MDL	0.97	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.15	J	0.058	MDL	0.97	MRL	ng/kg	J	Z
OCDF	2.5	B S J	0.036	MDL	9.7	MRL	ng/kg	J	Z

Sample ID: SL-639-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.63	J	0.094	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.67	J	0.082	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.7	C J	0.050	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	1.6	J	0.087	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.88	Q J	0.051	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	2.0	C J	0.079	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.49	Q J	0.092	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.55	J	0.084	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.35	Q J	0.046	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	1.1	J	0.072	MDL	5.0	MRL	ng/kg	J	Z
OCDF	9.1	S B J	0.061	MDL	9.9	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-2 **Laboratory: TA DEN**

EDD Filename: 280-36026-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-645-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 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
1,2,3,4,6,7,8-HPCDD	3.3	J	0.015	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.68	J	0.012	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.045	J	0.019	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.051	Q J	0.013	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.066	Q J	0.0082	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.44	J	0.013	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.10	J	0.0089	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.68	C J	0.012	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.070	J	0.011	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.11	Q J	0.019	MDL	4.9	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.048	Q J	0.016	MDL	4.9	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.058	Q J	0.0074	MDL	4.9	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.073	J	0.013	MDL	4.9	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.18	J	0.023	MDL	0.99	MRL	ng/kg	J	Z
OCDF	0.86	B S J	0.011	MDL	9.9	MRL	ng/kg	J	Z

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 8:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.3	J	0.043	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.20	Q J	0.067	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.17	Q J	0.068	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.19	J	0.034	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.80	J	0.068	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.27	Q J	0.033	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.59	Q J	0.064	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.13	J	0.044	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.19	Q J	0.065	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.13	Q J	0.045	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.21	J	0.032	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.19	J	0.041	MDL	5.0	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.31	J	0.074	MDL	1.0	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-2 **Laboratory: TA DEN**

EDD Filename: 280-36026-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-646-SA6-SB-0.0-0.5 *Collected:* 11/16/2012 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
OCDF	7.8	B S J	0.047	MDL	10	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36026-2 **Laboratory: TA DEN**

EDD Filename: 280-36026-2 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36026-2/
H2K210404

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36026-2 **Laboratory: TA DEN**

EDD Filename: 280-36026-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-527-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	2.1	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	1.0	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	C J	1.0	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	1.2	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	3.3	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.089	5.2	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.56	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.14	5.2	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	0.61	5.2	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.17	5.2	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.23	1.0	MRL	ng/kg	
SL-528-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	J	5.0	5.2	MRL	ng/kg	
	1,2,3,4,6,7,8-HPCDF	Q J	0.72	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.073	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.080	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.40	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	0.11	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.57	5.2	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.18	5.2	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	0.11	5.2	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.083	5.2	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.13	1.0	MRL	ng/kg	
	OCDF	S Q B J	0.96	10	MRL	ng/kg	
SL-530-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	2.0	4.9	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	Q J	0.18	4.9	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.15	4.9	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.16	4.9	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	1.1	4.9	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	0.21	4.9	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	1.4	4.9	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.069	4.9	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.12	4.9	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	0.088	4.9	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.056	4.9	MRL	ng/kg	
	2,3,7,8-TCDD	Q J	0.050	0.97	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.15	0.97	MRL	ng/kg	
	OCDF	B S J	2.5	9.7	MRL	ng/kg	
SL-639-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	0.63	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.67	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	C J	1.7	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	1.6	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.88	5.0	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	2.0	5.0	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.49	5.0	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.55	5.0	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.35	5.0	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	1.1	5.0	MRL	ng/kg	
	OCDF	S B J	9.1	9.9	MRL	ng/kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36026-2 **Laboratory: TA DEN**

EDD Filename: 280-36026-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-645-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	J	3.3	4.9	MRL	ng/kg	
	1,2,3,4,6,7,8-HPCDF	J	0.68	4.9	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	J	0.045	4.9	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.051	4.9	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.066	4.9	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.44	4.9	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	0.10	4.9	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	0.68	4.9	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDF	J	0.070	4.9	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.11	4.9	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q J	0.048	4.9	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.058	4.9	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.073	4.9	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.18	0.99	MRL	ng/kg	
	OCDF	B S J	0.86	9.9	MRL	ng/kg	
SL-646-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	4.3	5.0	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	Q J	0.20	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.17	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.19	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.80	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.27	5.0	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	Q J	0.59	5.0	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDF	J	0.13	5.0	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.19	5.0	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q J	0.13	5.0	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	0.21	5.0	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.19	5.0	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.31	1.0	MRL	ng/kg	
	OCDF	B S J	7.8	10	MRL	ng/kg	

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: November 16, 2012

LDC Report Date: April 17, 2013

Matrix: Soil

Parameters: Dioxins/Dibenzofurans

Validation Level: Level IV

Laboratory: TestAmerica, Inc.

Sample Delivery Group (SDG): 280-36026-2/H2K210404

Sample Identification

SL-639-SA6-SB-0.0-0.5
SL-645-SA6-SB-0.0-0.5
SL-646-SA6-SB-0.0-0.5
SL-527-SA6-SB-0.0-0.5
SL-528-SA6-SB-0.0-0.5
SL-530-SA6-SB-0.0-0.5

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 1613B for Polychlorinated Dioxins/Dibenzofurans.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and the USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005).

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

The following are definitions of the data qualifiers:

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

J Indicates an estimated value.

R Quality control indicates the data is not usable.

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

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

A Indicates the finding is based upon technical validation criteria.

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

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

I. Technical Holding Times

All technical holding time requirements were met.

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

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

The chromatographic resolution between 2,3,7,8-TCDD and the peaks representing any other unlabeled TCDD isomers was resolved with a valley of less than or equal to 25%.

PFK and static resolving power were within validation criteria.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 35.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

The minimum S/N ratio was greater than or equal to 10 for each unlabeled compound and labeled compound.

IV. 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 within QC limits.

The percent differences (%D) of the second source calibration standard were within QC limits.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated dioxin/dibenzofuran contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
H2K260000-026B	11/26/12	OCDD OCDF	0.16 ng/Kg 0.094 ng/Kg	All samples in SDG 280-36026-2/ H2K210404

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.

Sample EB-111512 (from SDG 280-35982-2) was identified as an equipment blank. No polychlorinated dioxin/dibenzofuran contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB-111512	11/15/12	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.12 pg/L 0.37 pg/L 0.24 pg/L 0.45 pg/L 3.8 pg/L 0.18 pg/L 0.13 pg/L 0.23 pg/L 0.20 pg/L 0.20 pg/L 0.16 pg/L 0.12 pg/L 0.58 pg/L	All samples in SDG 280-36026-2/ H2K210404

Sample FB-060512 (from SDG PH011) was identified as a field blank. No polychlorinated dioxin/dibenzofuran contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
FB-060512	6/5/12	1,2,3,7,8-PeCDF 2,3,7,8-TCDF	0.142 pg/L 0.208 pg/L	All samples in SDG 280-36026-2/ H2K210404

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

VI. Matrix Spike/Matrix Spike Duplicates

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 (LCS)

Laboratory control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries (%R) were within QC limits.

X. Target Compound Identifications

All target compound identifications were within validation criteria.

XI. Compound Quantitation

All compound quantitations were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
SL-645-SA6-SB-0.0-0.5 SL-646-SA6-SB-0.0-0.5 SL-527-SA6-SB-0.0-0.5 SL-528-SA6-SB-0.0-0.5 SL-530-SA6-SB-0.0-0.5	2,3,7,8-TCDF	2nd column confirmation was not performed for this compound.	This compound must be confirmed on the 2nd column per the method.	None	P

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 280-36026-2/ H2K210404	All compounds reported below the RL.	J (all detects)	A

XII. System Performance

The system performance was acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Data Qualification Summary - SDG 280-36026-2/H2K210404

SDG	Sample	Compound	Flag	A or P	Reason (Code)
280-36026-2/ H2K210404	SL-645-SA6-SB-0.0-0.5 SL-646-SA6-SB-0.0-0.5 SL-527-SA6-SB-0.0-0.5 SL-528-SA6-SB-0.0-0.5 SL-530-SA6-SB-0.0-0.5	2,3,7,8-TCDF	None	P	Compound quantitation (2^{nd} column confirmation)
280-36026-2/ H2K210404	SL-639-SA6-SB-0.0-0.5 SL-645-SA6-SB-0.0-0.5 SL-646-SA6-SB-0.0-0.5 SL-527-SA6-SB-0.0-0.5 SL-528-SA6-SB-0.0-0.5 SL-530-SA6-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG 280-36026-2/H2K210404

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG 280-36026-2/H2K210404

No Sample Data Qualified in this SDG

LDC #: 29419Q21 **VALIDATION COMPLETENESS WORKSHEET** Date: 4-9-13
SDG #: 280-36026-2/H2K210404 Level IV Page: 1 of 1
Laboratory: Test America, Inc. Reviewer: CM
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 11/16/12
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	≤ 20/35
IV.	Continuing Calibration/ICV	A	QC limits
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client
VII.	Laboratory control samples	A	LCS
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	A	
XI.	Compound quantitation/~~RL/LOQ/LODs~~	SW	
XII.	System performance	A	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks SW	~~A~~	EB=111512 (SDG: 280-35982-2) FB=060512 (SDG: PH012)

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: ~~Solid~~ Soil

1	SL-639-SA6-SB-0.0-0.5	11		21	H2K260000-026B	31	
2	SL-645-SA6-SB-0.0-0.5	12		22		32	
3	SL-646-SA6-SB-0.0-0.5	13		23		33	
4	SL-527-SA6-SB-0.0-0.5	14		24		34	
5	SL-528-SA6-SB-0.0-0.5	15		25		35	
6	SL-530-SA6-SB-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 29419Q21

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: SM
2nd Reviewer: AC

Method: Dioxins/Dibenzofurans (EPA ~~SW-846~~ Method 1613B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Was PFK exact mass 380.9760 verified?	✓			
Were the retention time windows established for all homologues?	✓			
Was the chromatographic resolution between 2,3,7,8-TCDD and peaks representing any other unlabeled TCDD isomers ≤ 25% ?	✓			
Is the static resolving power at least 10,000 (10% valley definition)?	✓			
Was the mass resolution adequately check with PFK?	✓			
Was the presence of 1,2,8,9-TCDD and 1,3,4,6,8-PeCDF verified?	✓			
III. Initial calibration				
Was the initial calibration performed at 5 concentration levels?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20% for unlabeled compounds and ≤ 35% for labeled compounds ?	✓			
Did all calibration standards meet the Ion Abundance Ratio criteria?	✓			
Was the signal to noise ratio for each target compound ≥ 2.5 and for each recovery and internal standard ≥ 10?	✓			
IV. Continuing calibration				
Was a routine calibration performed at the beginning and end of each 12 hour period?	✓			
Were all the concentrations for the unlabeled compounds and labeled compounds within the QC limits (Method 1613B, Table 6)?	✓			
Did all routine calibration standards meet the Ion Abundance Ratio criteria?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank performed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			

Validation Area	Yes	No	NA	Findings/Comments
VII. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
IX. Internal standards				
Were internal standard recoveries within the 25-150% criteria?	✓			
Was the minimum S/N ratio of all internal standard peaks ≥ 10?	✓			
X. Target compound identification				
For 2,3,7,8 substituted congeners with associated labeled standards, were the retention times of the two quantitation peaks within -1 to 3 sec. of the RT of the labeled standard?	✓			
For 2,3,7,8 substituted congeners without associated labeled standards, were the relative retention times of the two quantitation peaks within 0.005 time units of the RRT measured in the routine calibration?	✓			
For non-2,3,7,8 substituted congeners, were the retention times of the two quantitation peaks within RT established in the performance check solution?			✓	
Did compound spectra contain all characteristic ions listed in the table attached?	✓			
Was the Ion Abundance Ratio for the two quantitation ions within criteria?		✓		
Was the signal to noise ratio for each target compound and labeled standard ≥ 2.5?	✓			
Does the maximum intensity of each specified characteristic ion coincide within ± 2 seconds (includes labeled standards)?	✓			
For PCDF identification, was any signal (S/N ≥ 2.5, at ± seconds RT) detected in the corresponding PCDPE channel?		✓		
Was an acceptable lock mass recorded and monitored?	✓			
XI. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

A. 2,3,7,8-TCDD	F. 1,2,3,4,6,7,8-HpCDD	K. 1,2,3,4,7,8-HxCDF	P. 1,2,3,4,7,8,9-HpCDF	U. Total HpCDD
B. 1,2,3,7,8-PeCDD	G. OCDD	L. 1,2,3,6,7,8-HxCDF	Q. OCDF	V. Total TCDF
C. 1,2,3,4,7,8-HxCDD	H. 2,3,7,8-TCDF	M. 2,3,4,6,7,8-HxCDF	R. Total TCDD	W. Total PeCDF
D. 1,2,3,6,7,8-HxCDD	I. 1,2,3,7,8-PeCDF	N. 1,2,3,7,8,9-HxCDF	S. Total PeCDD	X. Total HxCDF
E. 1,2,3,7,8,9-HxCDD	J. 2,3,4,7,8-PeCDF	O. 1,2,3,4,6,7,8-HpCDF	T. Total HxCDD	Y. Total HpCDF

Notes:

LDC #: 29419Q21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: VM
2nd Reviewer: K

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

(Y) N N/A Were all samples associated with a method blank?
(Y) N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y (N) N/A Was method blank contamination less < CRQL for all target compounds?

Blank extraction date: 11/26/12 **Blank analysis date:** 12/04/12 **Associated samples:** All >5x
Conc. units: ng/kg

Compound	Blank ID	Sample Identification								
	H2K260000-026B	5x								
G	0.16*	0.8								
Q	0.094	0.47								

*EMPC

Blank extraction date: **Blank analysis date:** **Associated samples:**
Conc. units:

Compound	Blank ID	Sample Identification								

LDC #: 29419Q21

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins (EPA Method 1613B)

Blank units: pg/L **Associated sample units:** pg/g
Sampling date: 06/05/12
Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: All >5x

Compound	Blank ID	Sample Identification								
	FB-060512	5X								
I	0.142	0.71								
H	0.208	1.04								

* EMPC

FB-060512 (PH011)

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".

P:\CDM_SSFL_FB.wpd

LDC #: 29419Q21

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins (EPA Method 1613B)

Blank units: pg/L **Associated sample units:** ~~pg~~ ng/g
Sampling date: 11/15/12
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All >5x

Compound	Blank ID	Sample Identification								
	EB-111512	5X								
A	0.12*	0.6								
B	0.37	1.85								
D	0.24	1.2								
F	0.45	2.25								
G	3.8	19								
I	0.18*	0.9								
J	0.13*	0.65								
L	0.23*	1.15								
M	0.20	1								
N	0.20*	1								
O	0.16*	0.8								
P	0.12*	0.6								
Q	0.58	2.9								

* EMPC

EB-111512 (280-35982-2)

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".

P:\CDM_SSFL_EB.wpd

LDC #29419Q21

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: TM
2nd Reviewer: M

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Compound	Finding	Associated Samples	Qualifications
		H	no 2,3,7,8-TCDF confirmation	2-6	None / P

Comments: See sample calculation verification worksheet for recalculations

LDC #: 29419Q21

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: VM
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$ — A_x = Area of compound, A_{is} = Area of associated internal standard
average RRF = sum of the RRFs/number of standards — C_x = Concentration of compound, C_{is} = Concentration of internal standard
$\%RSD = 100 * (S/X)$ — S = Standard deviation of the RRFs, X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported RRF (CS_3 std)	Recalculated RRF (CS_3 std)	Reported %RSD	Recalculated %RSD
1	ICAL (RTX-5)	8-22-11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.094	1.094	1.023	1.023	14.7	14.7
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.118	1.118	1.093	1.093	3.7	3.7
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	1.125	1.125	1.078	1.078	7.7	7.7
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.110	1.110	1.093	1.093	6.2	6.25
			OCDF (^{13}C-~~OCDF~~ OCDD)	1.422	1.422	1.362	1.362	3.6	3.6
2	ICAL (DB-225)	11-20-12	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.969	0.969	0.936	0.936	9.2	9.2
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)						
			OCDF (^{13}C-~~OCDF~~ OCDD)						
3			2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)						
			OCDF (^{13}C-~~OCDF~~ OCDD)						

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 #: 29419Q21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: CM
2nd Reviewer: K

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

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

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

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	b121204S1	12-4-12	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.094	1.077	1.077		
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.118	1.210	1.210		
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	1.125	1.116	1.116		
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.110	1.073	1.073		
			OCDF (^{13}C-OCDD)	1.422	1.336	1.336		
2	b121204S2	12-4-12	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.094	1.084	1.084		
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.118	1.226	1.226		
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	1.125	1.106	1.106		
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.110	1.079	1.079		
			OCDF (^{13}C-OCDD)	1.422	1.439	1.439		
3	D212120SS2 (DB-225)	12-5-12	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.969	0.986	0.986		
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)					
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)					
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)					
			OCDF (^{13}C-OCDD)					

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

LDC #: 29419Q21

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JM
2nd Reviewer: M

METHOD: GC/MS Dioxins/Dibenzofurans (EPA Method 1613B)

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

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

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

LCS ID: HZK260000-026

Compound	Spike Added (ng/Kg)		Spiked Sample Concentration (ng/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
2,3,7,8-TCDD	20.0	NA	22.3	NA	111	111.5				
1,2,3,7,8-PeCDD	100		111		111	111				
1,2,3,4,7,8-HxCDD	100		104		104	104				
1,2,3,4,7,8,9-HpCDF	100		98.5		99	98.5				
OCDF	200		158		79	79				

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 #: 29419Q21

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

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

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

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

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

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

RRF = Relative Response Factor (average) from the initial calibration

Df = Dilution Factor.

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

Example:

Sample I.D. 6 , H :

Conc. = $\frac{(7020)(1000pg)(1)}{(4067297)(1.094)(10.4g)(0.987)}$

= 0.15 pg/g

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

280-36112-1

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-Nov-2012	SL-537-SA6-SB-0.0-0.5	280-36112-10	N	3050B	6010C	III
19-Nov-2012	SL-537-SA6-SB-0.0-0.5	280-36112-10	N	3050B	6020A	III
19-Nov-2012	SL-537-SA6-SB-0.0-0.5	280-36112-10	N	3546	8082A	III
19-Nov-2012	SL-537-SA6-SB-0.0-0.5	280-36112-10	N	7471B	7471B	III
19-Nov-2012	SL-537-SA6-SB-0.0-0.5	280-36112-9	N	3546	8270C SIM	III
19-Nov-2012	SL-537-SA6-SB-0.0-0.5	280-36112-9	N	3550C	8015B EFH	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5	280-36112-1	N	3546	8270C SIM	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5	280-36112-1	N	3550C	8015B EFH	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5	280-36112-2	N	3050B	6010C	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5	280-36112-2	N	3050B	6020A	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5	280-36112-2	N	3546	8082A	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5	280-36112-2	N	7471B	7471B	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5MS	280-36112-2MS	MS	3050B	6010C	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5MS	280-36112-2MS	MS	3050B	6020A	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5MS	280-36112-2MS	MS	7471B	7471B	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5MSD	280-36112-2MSD	MSD	3050B	6010C	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5MSD	280-36112-2MSD	MSD	3050B	6020A	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5MSD	280-36112-2MSD	MSD	7471B	7471B	III
19-Nov-2012	SL-526-SA6-SB-0.0-0.5	280-36112-7	N	3546	8270C SIM	III
19-Nov-2012	SL-526-SA6-SB-0.0-0.5	280-36112-7	N	3550C	8015B EFH	III
19-Nov-2012	SL-526-SA6-SB-0.0-0.5	280-36112-8	N	3050B	6010C	III
19-Nov-2012	SL-526-SA6-SB-0.0-0.5	280-36112-8	N	3050B	6020A	III
19-Nov-2012	SL-526-SA6-SB-0.0-0.5	280-36112-8	N	3546	8082A	III
19-Nov-2012	SL-526-SA6-SB-0.0-0.5	280-36112-8	N	7471B	7471B	III
19-Nov-2012	SL-525-SA6-SB-0.0-0.5	280-36112-5	N	3546	8270C SIM	III
19-Nov-2012	SL-525-SA6-SB-0.0-0.5	280-36112-5	N	3550C	8015B EFH	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field 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-Nov-2012	SL-525-SA6-SB-0.0-0.5	280-36112-6	N	3050B	6010C	III
19-Nov-2012	SL-525-SA6-SB-0.0-0.5	280-36112-6	N	3050B	6020A	III
19-Nov-2012	SL-525-SA6-SB-0.0-0.5	280-36112-6	N	3546	8082A	III
19-Nov-2012	SL-525-SA6-SB-0.0-0.5	280-36112-6	N	7471B	7471B	III
19-Nov-2012	SL-524-SA6-SB-0.0-0.5	280-36112-3	N	3546	8270C SIM	III
19-Nov-2012	SL-524-SA6-SB-0.0-0.5	280-36112-3	N	3550C	8015B EFH	III
19-Nov-2012	SL-524-SA6-SB-0.0-0.5	280-36112-4	N	3050B	6010C	III
19-Nov-2012	SL-524-SA6-SB-0.0-0.5	280-36112-4	N	3050B	6020A	III
19-Nov-2012	SL-524-SA6-SB-0.0-0.5	280-36112-4	N	3546	8082A	III
19-Nov-2012	SL-524-SA6-SB-0.0-0.5	280-36112-4	N	7471B	7471B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: **SL-523-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 8:40:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22	J	0.29	MDL	36	MRL	mg/Kg	J	Z

Sample ID: **SL-523-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 8:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z, A
BORON	2.1	J	0.96	MDL	9.5	MRL	mg/Kg	U	F
CALCIUM	2700		14	MDL	49	MRL	mg/Kg	J	A
MANGANESE	270	J	0.098	MDL	490	MRL	mg/Kg	J	Z
POTASSIUM	2900	J	40	MDL	6300	MRL	mg/Kg	J	Z, A
SODIUM	97	J	58	MDL	490	MRL	mg/Kg	J	Z
STRONTIUM	13	B	0.035	MDL	0.49	MRL	mg/Kg	J	A
TIN	1.0	J B	0.89	MDL	11	MRL	mg/Kg	U	B
Zirconium	1.1	J	0.35	MDL	8.4	MRL	mg/Kg	U	B

Sample ID: **SL-524-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 10:40:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22	J	0.31	MDL	39	MRL	mg/Kg	J	Z

Sample ID: **SL-524-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 10:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z, A
BORON	1.2	J	1.0	MDL	10	MRL	mg/Kg	U	F
CALCIUM	2300		15	MDL	52	MRL	mg/Kg	J	A
MANGANESE	250	J	0.10	MDL	520	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	43	MDL	6700	MRL	mg/Kg	J	Z, A
SODIUM	94	J	61	MDL	520	MRL	mg/Kg	J	Z
STRONTIUM	13	B	0.038	MDL	0.52	MRL	mg/Kg	J	A
TIN	1.1	J B	0.95	MDL	11	MRL	mg/Kg	U	B
Zirconium	1.1	J	0.37	MDL	9.0	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-525-SA6-SB-0.0-0.5 **Collected:** 11/19/2012 10:05:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22	J	0.28	MDL	34	MRL	mg/Kg	J	Z

Sample ID: SL-525-SA6-SB-0.0-0.5 **Collected:** 11/19/2012 10:05:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z, A
BORON	1.2	J	0.90	MDL	8.9	MRL	mg/Kg	U	F
CALCIUM	2300		13	MDL	46	MRL	mg/Kg	J	A
MANGANESE	260	J	0.092	MDL	450	MRL	mg/Kg	J	Z
POTASSIUM	3000	J	38	MDL	5900	MRL	mg/Kg	J	Z, A
SODIUM	80	J	54	MDL	460	MRL	mg/Kg	U	F
STRONTIUM	12	B	0.033	MDL	0.45	MRL	mg/Kg	J	A
TIN	1.1	J B	0.84	MDL	10	MRL	mg/Kg	U	B
Zirconium	1.1	J	0.32	MDL	7.9	MRL	mg/Kg	J	Z

Sample ID: SL-526-SA6-SB-0.0-0.5 **Collected:** 11/19/2012 9:20:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	23	J	0.29	MDL	36	MRL	mg/Kg	J	Z

Sample ID: SL-526-SA6-SB-0.0-0.5 **Collected:** 11/19/2012 9:20:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z, A
BORON	0.97	J	0.95	MDL	9.4	MRL	mg/Kg	U	F
CALCIUM	2200		14	MDL	48	MRL	mg/Kg	J	A
MANGANESE	260	J	0.097	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	3100	J	40	MDL	6200	MRL	mg/Kg	J	Z, A
SODIUM	78	J	57	MDL	480	MRL	mg/Kg	U	F
STRONTIUM	10	B	0.035	MDL	0.48	MRL	mg/Kg	J	A
TIN	0.97	J B	0.88	MDL	11	MRL	mg/Kg	U	B
Zirconium	0.99	J	0.34	MDL	8.3	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-537-SA6-SB-0.0-0.5 *Collected:* 11/19/2012 7:44:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	18	J	0.32	MDL	40	MRL	mg/Kg	J	Z

Sample ID: SL-537-SA6-SB-0.0-0.5 *Collected:* 11/19/2012 7:44:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	7500	J	1.7	MDL	22000	MRL	mg/Kg	J	Z, A
CALCIUM	1500		15	MDL	54	MRL	mg/Kg	J	A
MANGANESE	250	J	0.11	MDL	540	MRL	mg/Kg	J	Z
POTASSIUM	2800	J	44	MDL	6900	MRL	mg/Kg	J	Z, A
SODIUM	78	J	64	MDL	540	MRL	mg/Kg	U	F
STRONTIUM	7.6	B	0.039	MDL	0.54	MRL	mg/Kg	J	A
TIN	1.2	J B	0.99	MDL	12	MRL	mg/Kg	U	B

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-523-SA6-SB-0.0-0.5 *Collected:* 11/19/2012 8:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.026	J	0.013	MDL	8.2	MRL	mg/Kg	J	Z, Q
ARSENIC	3.7	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	83	J	0.066	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.50	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.21	J	0.0088	MDL	0.94	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.071	MDL	35	MRL	mg/Kg	J	Z
COBALT	5.0	J	0.0062	MDL	20	MRL	mg/Kg	J	Z
COPPER	7.5	J	0.067	MDL	27	MRL	mg/Kg	J	Z
LEAD	8.3	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.35	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	10	J	0.024	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.042	J	0.019	MDL	0.74	MRL	mg/Kg	J	Z
THALLIUM	0.25	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z
VANADIUM	32	J	0.036	MDL	58	MRL	mg/Kg	J	Z
ZINC	56	J	0.30	MDL	100	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: **SL-524-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 10:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.020	J	0.014	MDL	8.7	MRL	mg/Kg	J	Z, Q
ARSENIC	3.2	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	67	J	0.071	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.45	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.15	J	0.0094	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	14	J	0.076	MDL	37	MRL	mg/Kg	J	Z
COBALT	4.5	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	7.0	J	0.071	MDL	29	MRL	mg/Kg	J	Z
LEAD	6.4	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.33	J	0.018	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	8.3	J	0.025	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.034	J	0.020	MDL	0.79	MRL	mg/Kg	J	Z
THALLIUM	0.22	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	27	J	0.039	MDL	62	MRL	mg/Kg	J	Z
ZINC	49	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: **SL-525-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 10:05:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.020	J	0.014	MDL	8.8	MRL	mg/Kg	J	Z, Q
ARSENIC	3.8	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	77	J	0.071	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.47	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.18	J	0.0095	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.077	MDL	37	MRL	mg/Kg	J	Z
COBALT	5.2	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	6.7	J	0.072	MDL	29	MRL	mg/Kg	J	Z
LEAD	7.0	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.33	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	9.3	J	0.026	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.039	J	0.021	MDL	0.80	MRL	mg/Kg	J	Z
THALLIUM	0.23	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	30	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	51	J	0.32	MDL	110	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: **SL-526-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 9:20:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.015	J	0.014	MDL	9.0	MRL	mg/Kg	J	Z, Q
ARSENIC	3.8	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	71	J	0.073	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.47	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.15	J	0.0097	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.078	MDL	38	MRL	mg/Kg	J	Z
COBALT	4.9	J	0.0068	MDL	22	MRL	mg/Kg	J	Z
COPPER	6.5	J	0.073	MDL	30	MRL	mg/Kg	J	Z
LEAD	6.0	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.30	J	0.018	MDL	5.5	MRL	mg/Kg	J	Z
NICKEL	9.0	J	0.026	MDL	30	MRL	mg/Kg	J	Z
SILVER	0.026	J	0.021	MDL	0.82	MRL	mg/Kg	J	Z
THALLIUM	0.23	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	29	J	0.040	MDL	64	MRL	mg/Kg	J	Z
ZINC	53	J	0.33	MDL	110	MRL	mg/Kg	J	Z

Sample ID: **SL-537-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 7:44:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.015	J	0.013	MDL	8.3	MRL	mg/Kg	J	Z, Q
ARSENIC	2.0	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	60	J	0.067	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.33	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.21	J	0.0089	MDL	0.95	MRL	mg/Kg	J	Z
CHROMIUM	7.8	J	0.072	MDL	35	MRL	mg/Kg	J	Z
COBALT	3.7	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	4.1	J	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	10	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.18	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	5.0	J	0.024	MDL	28	MRL	mg/Kg	J	Z
THALLIUM	0.22	J	0.0033	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	18	J	0.037	MDL	59	MRL	mg/Kg	J	Z
ZINC	72	J	0.30	MDL	100	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: **SL-537-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 7:44:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0085	J	0.0068	MDL	0.025	MRL	mg/Kg	U	F

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: **SL-523-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 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
EFH(C21-C30)	3.7	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z
EFH(C30-C40)	8.3	J	1.1	MDL	11	MRL	mg/Kg	J	Z

Sample ID: **SL-524-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 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
EFH(C15-C20)	1.2	J	1.1	MDL	5.3	MRL	mg/Kg	J	Z
EFH(C21-C30)	3.0	J	1.1	MDL	5.3	MRL	mg/Kg	J	Z

Sample ID: **SL-525-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 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
EFH(C21-C30)	3.4	J	1.1	MDL	5.3	MRL	mg/Kg	J	Z
EFH(C30-C40)	7.2	J	1.1	MDL	11	MRL	mg/Kg	J	Z

Sample ID: **SL-526-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 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
EFH(C21-C30)	2.6	J	1.1	MDL	5.3	MRL	mg/Kg	J	Z

Sample ID: **SL-537-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 7:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	2.4	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: **SL-523-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 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
1-METHYLNAPHTHALENE	0.53	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.0	J	0.32	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.42	J	0.18	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	0.95	J	0.78	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.9	J	1.3	MDL	10	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	1.2	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	2.6	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	2.2	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	0.82	J	0.49	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.34	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	2.1	J	1.2	MDL	10	MRL	ug/Kg	J	Z

Sample ID: **SL-524-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 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
1-METHYLNAPHTHALENE	0.56	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.94	J	0.32	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	5.2	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	3.4	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	1.3	J	0.48	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	2.2	J	0.34	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	3.9	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: **SL-525-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 10:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.96	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.3	J	0.32	MDL	10	MRL	ug/Kg	J	Z
ANTHRACENE	0.98	J	0.75	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.94	MDL	10	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	2.1	J	1.2	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	4.3	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	3.8	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	5.5	J	0.49	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	3.0	J	0.34	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: **SL-525-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 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
PHENANTHRENE	4.1	J	1.2	MDL	10	MRL	ug/Kg	J	Z

Sample ID: **SL-526-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 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-METHYLNAPHTHALENE	1.9	J	0.26	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	2.3	J	0.31	MDL	10	MRL	ug/Kg	J	Z
ANTHRACENE	0.81	J	0.72	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.90	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.74	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.5	J	1.2	MDL	10	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	2.0	J	1.1	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	5.4	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	4.3	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	3.6	J	0.47	MDL	10	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	1.1	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	7.2	J	0.33	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	6.4	J	1.1	MDL	10	MRL	ug/Kg	J	Z
PYRENE	1.7	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: **SL-537-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 7:44:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.36	J	0.28	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.60	J	0.34	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.98	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.80	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.3	J	1.3	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	1.2	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	2.5	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	2.6	J	1.1	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.35	MDL	11	MRL	ug/Kg	J	Z
PHENANTHRENE	1.9	J	1.2	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
F	Equipment Blank Contamination
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36112-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-148797/1-A	11/28/2012 1:21:00 PM	STRONTIUM TIN	0.0460 mg/Kg 0.949 mg/Kg	SL-523-SA6-SB-0.0-0.5 SL-524-SA6-SB-0.0-0.5 SL-525-SA6-SB-0.0-0.5 SL-526-SA6-SB-0.0-0.5 SL-537-SA6-SB-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-523-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.0 mg/Kg	1.0U mg/Kg
SL-524-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg
SL-525-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg
SL-526-SA6-SB-0.0-0.5(RES/TOT)	TIN	0.97 mg/Kg	0.97U mg/Kg
SL-537-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.2 mg/Kg	1.2U mg/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-112012(RES/TOT)	11/20/2012 3:00:00 PM	BORON MANGANESE SODIUM	0.0055 mg/L 0.00051 mg/L 0.17 mg/L	SL-523-SA6-SB-0.0-0.5 SL-524-SA6-SB-0.0-0.5 SL-525-SA6-SB-0.0-0.5 SL-526-SA6-SB-0.0-0.5 SL-537-SA6-SB-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-523-SA6-SB-0.0-0.5(RES/TOT)	BORON	2.1 mg/Kg	2.1U mg/Kg
SL-524-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.2 mg/Kg	1.2U mg/Kg
SL-525-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.2 mg/Kg	1.2U mg/Kg
SL-525-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	80 mg/Kg	80U mg/Kg
SL-526-SA6-SB-0.0-0.5(RES/TOT)	BORON	0.97 mg/Kg	0.97U mg/Kg
SL-526-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	78 mg/Kg	78U mg/Kg
SL-537-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	78 mg/Kg	78U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-523-SA6-SB-0.0-0.5MS (TOT)	ALUMINUM	1517	1713	75.00-125.00	-	ALUMINUM	
	IRON	411	842	75.00-125.00	-	IRON	
SL-523-SA6-SB-0.0-0.5MSD (TOT)	TITANIUM	177	272	75.00-125.00	-	TITANIUM	
(SL-523-SA6-SB-0.0-0.5 SL-524-SA6-SB-0.0-0.5 SL-525-SA6-SB-0.0-0.5 SL-526-SA6-SB-0.0-0.5 SL-537-SA6-SB-0.0-0.5)							No Qual, >4x

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-523-SA6-SB-0.0-0.5MS (TOT)	ANTIMONY	6	6	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-523-SA6-SB-0.0-0.5MSD (TOT)							
(SL-523-SA6-SB-0.0-0.5 SL-524-SA6-SB-0.0-0.5 SL-525-SA6-SB-0.0-0.5 SL-526-SA6-SB-0.0-0.5 SL-537-SA6-SB-0.0-0.5)							Post Spike = 103%

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-523-SA6-SB-0.0-0.5	ALUMINUM	J	12000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	2.1	9.5	MRL	mg/Kg	
	LITHIUM	J	22	36	MRL	mg/Kg	
	MANGANESE	J	270	490	MRL	mg/Kg	
	POTASSIUM	J	2900	6300	MRL	mg/Kg	
	SODIUM	J	97	490	MRL	mg/Kg	
	TIN	J B	1.0	11	MRL	mg/Kg	
	Zirconium	J	1.1	8.4	MRL	mg/Kg	
SL-524-SA6-SB-0.0-0.5	ALUMINUM	J	11000	21000	MRL	mg/Kg	J (all detects)
	BORON	J	1.2	10	MRL	mg/Kg	
	LITHIUM	J	22	39	MRL	mg/Kg	
	MANGANESE	J	250	520	MRL	mg/Kg	
	POTASSIUM	J	2700	6700	MRL	mg/Kg	
	SODIUM	J	94	520	MRL	mg/Kg	
	TIN	J B	1.1	11	MRL	mg/Kg	
	Zirconium	J	1.1	9.0	MRL	mg/Kg	
SL-525-SA6-SB-0.0-0.5	ALUMINUM	J	12000	18000	MRL	mg/Kg	J (all detects)
	BORON	J	1.2	8.9	MRL	mg/Kg	
	LITHIUM	J	22	34	MRL	mg/Kg	
	MANGANESE	J	260	450	MRL	mg/Kg	
	POTASSIUM	J	3000	5900	MRL	mg/Kg	
	SODIUM	J	80	460	MRL	mg/Kg	
	TIN	J B	1.1	10	MRL	mg/Kg	
	Zirconium	J	1.1	7.9	MRL	mg/Kg	
SL-526-SA6-SB-0.0-0.5	ALUMINUM	J	11000	19000	MRL	mg/Kg	J (all detects)
	BORON	J	0.97	9.4	MRL	mg/Kg	
	LITHIUM	J	23	36	MRL	mg/Kg	
	MANGANESE	J	260	480	MRL	mg/Kg	
	POTASSIUM	J	3100	6200	MRL	mg/Kg	
	SODIUM	J	78	480	MRL	mg/Kg	
	TIN	J B	0.97	11	MRL	mg/Kg	
	Zirconium	J	0.99	8.3	MRL	mg/Kg	
SL-537-SA6-SB-0.0-0.5	ALUMINUM	J	7500	22000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	18	40	MRL	mg/Kg	
	MANGANESE	J	250	540	MRL	mg/Kg	
	POTASSIUM	J	2800	6900	MRL	mg/Kg	
	SODIUM	J	78	540	MRL	mg/Kg	
	TIN	J B	1.2	12	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-523-SA6-SB-0.0-0.5	ANTIMONY	J	0.026	8.2	MRL	mg/Kg	
	ARSENIC	J	3.7	14	MRL	mg/Kg	
	BARIUM	J	83	130	MRL	mg/Kg	
	BERYLLIUM	J	0.50	1.0	MRL	mg/Kg	
	CADMIUM	J	0.21	0.94	MRL	mg/Kg	
	CHROMIUM	J	16	35	MRL	mg/Kg	
	COBALT	J	5.0	20	MRL	mg/Kg	
	COPPER	J	7.5	27	MRL	mg/Kg	J (all detects)
	LEAD	J	8.3	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.35	5.0	MRL	mg/Kg	
	NICKEL	J	10	27	MRL	mg/Kg	
	SILVER	J	0.042	0.74	MRL	mg/Kg	
	THALLIUM	J	0.25	0.43	MRL	mg/Kg	
	VANADIUM	J	32	58	MRL	mg/Kg	
	ZINC	J	56	100	MRL	mg/Kg	
SL-524-SA6-SB-0.0-0.5	ANTIMONY	J	0.020	8.7	MRL	mg/Kg	
	ARSENIC	J	3.2	15	MRL	mg/Kg	
	BARIUM	J	67	140	MRL	mg/Kg	
	BERYLLIUM	J	0.45	1.1	MRL	mg/Kg	
	CADMIUM	J	0.15	1.0	MRL	mg/Kg	
	CHROMIUM	J	14	37	MRL	mg/Kg	
	COBALT	J	4.5	21	MRL	mg/Kg	
	COPPER	J	7.0	29	MRL	mg/Kg	J (all detects)
	LEAD	J	6.4	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.33	5.3	MRL	mg/Kg	
	NICKEL	J	8.3	29	MRL	mg/Kg	
	SILVER	J	0.034	0.79	MRL	mg/Kg	
	THALLIUM	J	0.22	0.46	MRL	mg/Kg	
	VANADIUM	J	27	62	MRL	mg/Kg	
	ZINC	J	49	110	MRL	mg/Kg	
SL-525-SA6-SB-0.0-0.5	ANTIMONY	J	0.020	8.8	MRL	mg/Kg	
	ARSENIC	J	3.8	15	MRL	mg/Kg	
	BARIUM	J	77	140	MRL	mg/Kg	
	BERYLLIUM	J	0.47	1.1	MRL	mg/Kg	
	CADMIUM	J	0.18	1.0	MRL	mg/Kg	
	CHROMIUM	J	15	37	MRL	mg/Kg	
	COBALT	J	5.2	21	MRL	mg/Kg	
	COPPER	J	6.7	29	MRL	mg/Kg	J (all detects)
	LEAD	J	7.0	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.33	5.4	MRL	mg/Kg	
	NICKEL	J	9.3	29	MRL	mg/Kg	
	SILVER	J	0.039	0.80	MRL	mg/Kg	
	THALLIUM	J	0.23	0.47	MRL	mg/Kg	
	VANADIUM	J	30	63	MRL	mg/Kg	
	ZINC	J	51	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-526-SA6-SB-0.0-0.5	ANTIMONY	J	0.015	9.0	MRL	mg/Kg	
	ARSENIC	J	3.8	15	MRL	mg/Kg	
	BARIUM	J	71	140	MRL	mg/Kg	
	BERYLLIUM	J	0.47	1.1	MRL	mg/Kg	
	CADMIUM	J	0.15	1.0	MRL	mg/Kg	
	CHROMIUM	J	15	38	MRL	mg/Kg	
	COBALT	J	4.9	22	MRL	mg/Kg	
	COPPER	J	6.5	30	MRL	mg/Kg	J (all detects)
	LEAD	J	6.0	35	MRL	mg/Kg	
	MOLYBDENUM	J	0.30	5.5	MRL	mg/Kg	
	NICKEL	J	9.0	30	MRL	mg/Kg	
	SILVER	J	0.026	0.82	MRL	mg/Kg	
	THALLIUM	J	0.23	0.47	MRL	mg/Kg	
	VANADIUM	J	29	64	MRL	mg/Kg	
	ZINC	J	53	110	MRL	mg/Kg	
SL-537-SA6-SB-0.0-0.5	ANTIMONY	J	0.015	8.3	MRL	mg/Kg	
	ARSENIC	J	2.0	14	MRL	mg/Kg	
	BARIUM	J	60	130	MRL	mg/Kg	
	BERYLLIUM	J	0.33	1.0	MRL	mg/Kg	
	CADMIUM	J	0.21	0.95	MRL	mg/Kg	
	CHROMIUM	J	7.8	35	MRL	mg/Kg	
	COBALT	J	3.7	20	MRL	mg/Kg	
	COPPER	J	4.1	28	MRL	mg/Kg	J (all detects)
	LEAD	J	10	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.18	5.1	MRL	mg/Kg	
	NICKEL	J	5.0	28	MRL	mg/Kg	
	THALLIUM	J	0.22	0.44	MRL	mg/Kg	
	VANADIUM	J	18	59	MRL	mg/Kg	
	ZINC	J	72	100	MRL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-537-SA6-SB-0.0-0.5	MERCURY	J	0.0085	0.025	MRL	mg/Kg	J (all detects)

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-523-SA6-SB-0.0-0.5	EFH(C21-C30)	J	3.7	5.4	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	8.3	11	MRL	mg/Kg	
SL-524-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.2	5.3	MRL	mg/Kg	J (all detects)
	EFH(C21-C30)	J	3.0	5.3	MRL	mg/Kg	
SL-525-SA6-SB-0.0-0.5	EFH(C21-C30)	J	3.4	5.3	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	7.2	11	MRL	mg/Kg	
SL-526-SA6-SB-0.0-0.5	EFH(C21-C30)	J	2.6	5.3	MRL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-537-SA6-SB-0.0-0.5	EFH(C21-C30)	J	2.4	5.2	MRL	mg/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-523-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.53	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.0	10	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.42	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	0.95	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.9	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	10	MRL	ug/Kg	
	CHRYSENE	J	2.6	10	MRL	ug/Kg	
	FLUORANTHENE	J	2.2	10	MRL	ug/Kg	
	FLUORENE	J	0.82	10	MRL	ug/Kg	
	NAPHTHALENE	J	1.4	10	MRL	ug/Kg	
	PHENANTHRENE	J	2.1	10	MRL	ug/Kg	
SL-524-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.56	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.94	10	MRL	ug/Kg	
	CHRYSENE	J	5.2	10	MRL	ug/Kg	
	FLUORANTHENE	J	3.4	10	MRL	ug/Kg	
	FLUORENE	J	1.3	10	MRL	ug/Kg	
	NAPHTHALENE	J	2.2	10	MRL	ug/Kg	
	PHENANTHRENE	J	3.9	10	MRL	ug/Kg	
SL-525-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.96	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.3	10	MRL	ug/Kg	
	ANTHRACENE	J	0.98	10	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.2	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	2.1	10	MRL	ug/Kg	
	CHRYSENE	J	4.3	10	MRL	ug/Kg	
	FLUORANTHENE	J	3.8	10	MRL	ug/Kg	
	FLUORENE	J	5.5	10	MRL	ug/Kg	
	NAPHTHALENE	J	3.0	10	MRL	ug/Kg	
	PHENANTHRENE	J	4.1	10	MRL	ug/Kg	
SL-526-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.9	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	2.3	10	MRL	ug/Kg	
	ANTHRACENE	J	0.81	10	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.3	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	3.5	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	2.0	10	MRL	ug/Kg	
	CHRYSENE	J	5.4	10	MRL	ug/Kg	
	FLUORANTHENE	J	4.3	10	MRL	ug/Kg	
	FLUORENE	J	3.6	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	10	MRL	ug/Kg	
	NAPHTHALENE	J	7.2	10	MRL	ug/Kg	
	PHENANTHRENE	J	6.4	10	MRL	ug/Kg	
	PYRENE	J	1.7	10	MRL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36112-1 **Laboratory: TA DEN**

EDD Filename: 280-36112-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-537-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.36	11	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.60	11	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	2.3	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	11	MRL	ug/Kg	
	CHRYSENE	J	2.5	11	MRL	ug/Kg	
	FLUORANTHENE	J	2.6	11	MRL	ug/Kg	
	NAPHTHALENE	J	1.2	11	MRL	ug/Kg	
	PHENANTHRENE	J	1.9	11	MRL	ug/Kg	

LDC #: 29419S4
SDG #: 280-36112-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/2/13
Page: 1 of 1
Reviewer: AR
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/19/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MSD (Al, Fe, ~~Mn~~, Ti, ~~Ba~~ 4X ; Sb RS = 103% (J/UJ))
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	NA	
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 = EB-112012 (280-36180-1) FB = FB-060512 (12F037)

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-523-SA6-SB-0.0-0.5	11		21		31	
2	SL-524-SA6-SB-0.0-0.5	12		22		32	
3	SL-525-SA6-SB-0.0-0.5	13		23		33	
4	SL-526-SA6-SB-0.0-0.5	14		24		34	
5	SL-537-SA6-SB-0.0-0.5	15		25		35	
6	SL-523-SA6-SB-0.0-0.5MS	16		26		36	
7	SL-523-SA6-SB-0.0-0.5MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

LDC #: 29419S4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer:
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1								
Zr			3.33	1.665	1.1								

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 29419S4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/20/12 Soil factor applied 100x; Hg=83x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification											
	EB-112012 (SDG: 280-36180-1)	Action Limit	1	2	3	4	5						
B	0.0055	2.75	2.1	1.2	1.2	0.97							
Mn	0.00051	0.255											
Na	0.17	85			80	78	78						
Hg	0.000034	0.017					0.0085						

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 #: 29419S4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer: IV

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 06/05/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-060512 (SDG:12F037)	Action Limit											
Al	0.0270	13.5											
Ca	0.0263	13.15											
Cu	0.000954	0.477											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-36112-2

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 280-36112-2

SDG No:

Lab Name: TestAmerica Denver Job No: 280-36112-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	12000	J	13900	J	12	V	6010C
Boron	2.1	J	ND		NC		6010C
Calcium	2700	J	3030	J	13	V	6010C
Iron	17000		18100		5.8		6010C
Lithium	22	J	23.1	J	2.9		6010C
Magnesium	4900		5290		8.9		6010C
Manganese	270	J	296	J	8.9		6010C
Phosphorus	400		438		9.7		6010C
Potassium	2900	J	3290	J	12	V	6010C
Sodium	97	J	ND		NC		6010C
Strontium	13		14.7		13	V	6010C
Tin	1.0	J	ND		NC		6010C
Titanium	890		952		7.0		6010C
Zirconium	1.1	J	ND		NC		6010C



Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

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-Nov-2012	SL-537-SA6-SB-0.0-0.5	280-36112-10	N	1613	1613B	III
19-Nov-2012	SL-523-SA6-SB-0.0-0.5	280-36112-2	N	1613	1613B	III
19-Nov-2012	SL-526-SA6-SB-0.0-0.5	280-36112-8	N	1613	1613B	III
19-Nov-2012	SL-525-SA6-SB-0.0-0.5	280-36112-6	N	1613	1613B	III
19-Nov-2012	SL-524-SA6-SB-0.0-0.5	280-36112-4	N	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-2 **Laboratory: TA DEN**

EDD Filename: 280-36112-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-523-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.2	J	0.099	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	2.0	J	0.044	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.0	J	0.034	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	1.3	Q J	0.034	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	3.1	C J	0.043	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.11	Q J	0.042	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.83	Q J	0.071	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.17	Q J	0.053	MDL	5.6	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.61	J	0.031	MDL	5.6	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.21	J	0.047	MDL	5.6	MRL	ng/kg	J	Z
2,3,7,8-TCDD	0.19	J	0.12	MDL	1.1	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.28	J	0.076	MDL	1.1	MRL	ng/kg	J	Z

Sample ID: **SL-524-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	3.3	J	0.045	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	4.3	Q J	0.045	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.18	Q J	0.054	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	1.2	Q J	0.067	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.19	J	0.049	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	2.0	J	0.039	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.24	J	0.049	MDL	5.3	MRL	ng/kg	J	Z
2,3,7,8-TCDD	0.21	Q J	0.10	MDL	1.1	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.15	Q J	0.061	MDL	1.1	MRL	ng/kg	J	Z
OCDD	16000	B E	0.18	MDL	11	MRL	ng/kg	J	*XI

Sample ID: **SL-525-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 10:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.9	J	0.095	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.81	J	0.057	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.90	J	0.045	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.94	Q J	0.043	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	2.6	C S J	0.056	MDL	5.4	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-2 **Laboratory: TA DEN**

EDD Filename: 280-36112-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-525-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 10:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.31	Q J	0.073	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.087	Q J	0.054	MDL	5.4	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.47	Q J	0.039	MDL	5.4	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.10	Q J	0.051	MDL	5.4	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.18	J	0.091	MDL	1.1	MRL	ng/kg	J	Z

Sample ID: **SL-526-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.2	J	0.084	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.91	Q J	0.067	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.81	J	0.050	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	3.9	J	0.077	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.95	Q J	0.053	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	1.9	C J	0.067	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.31	Q J	0.078	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.37	J	0.048	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.11	Q J	0.052	MDL	5.3	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.14	Q J	0.081	MDL	1.1	MRL	ng/kg	J	Z

Sample ID: **SL-537-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 7:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.3	J	0.048	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.43	J	0.082	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.22	Q J	0.050	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	2.3	J	0.042	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.83	J	0.050	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	1.1	J	0.041	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.86	J	0.047	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.11	J	0.050	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.16	Q J	0.074	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.77	J	0.064	MDL	5.5	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.47	Q J	0.038	MDL	5.5	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	2.2	J	0.059	MDL	5.5	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-2 **Laboratory: TA DEN**

EDD Filename: 280-36112-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-537-SA6-SB-0.0-0.5** ***Collected:*** **11/19/2012 7:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
OCDF	4.3	S B J	0.052	MDL	11	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36112-2 **Laboratory: TA DEN**

EDD Filename: 280-36112-2 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
*XI	Exceeded Calibration Range
A	Professional Judgment
B	Method Blank Contamination
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36112-2/
H2K240402

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36112-2 **Laboratory: TA DEN**

EDD Filename: 280-36112-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-523-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	2.2	5.6	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	2.0	5.6	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	1.0	5.6	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	1.3	5.6	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	3.1	5.6	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.11	5.6	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.83	5.6	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q J	0.17	5.6	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	0.61	5.6	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.21	5.6	MRL	ng/kg	
	2,3,7,8-TCDD	J	0.19	1.1	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.28	1.1	MRL	ng/kg	
SL-524-SA6-SB-0.0-0.5	1,2,3,4,7,8-HxCDD	J	3.3	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	4.3	5.3	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.18	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	1.2	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.19	5.3	MRL	ng/kg	J (all detects)
	2,3,4,6,7,8-HXCDF	J	2.0	5.3	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.24	5.3	MRL	ng/kg	
	2,3,7,8-TCDD	Q J	0.21	1.1	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.15	1.1	MRL	ng/kg	
SL-525-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	1.9	5.4	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.81	5.4	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.90	5.4	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.94	5.4	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C S J	2.6	5.4	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.31	5.4	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q J	0.087	5.4	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.47	5.4	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.10	5.4	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.18	1.1	MRL	ng/kg	
SL-526-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	1.2	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.91	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.81	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	3.9	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.95	5.3	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDD	C J	1.9	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.31	5.3	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	0.37	5.3	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.11	5.3	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.14	1.1	MRL	ng/kg	
SL-537-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	4.3	5.5	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	J	0.43	5.5	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.22	5.5	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	2.3	5.5	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.83	5.5	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	1.1	5.5	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.86	5.5	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDF	J	0.11	5.5	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.16	5.5	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.77	5.5	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.47	5.5	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	2.2	5.5	MRL	ng/kg	
	OCDF	S B J	4.3	11	MRL	ng/kg	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

SAMPLE DELIVERY GROUP

280-36180-1

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-Nov-2012	TB-112012	280-36180-8	TB	METHOD	8015B GRO	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5	280-36180-1	N	3546	8270C SIM	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5	280-36180-1	N	3550C	8015B EFH	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5	280-36180-2	N	3050B	6010C	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5	280-36180-2	N	3050B	6020A	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5	280-36180-2	N	3546	8082A	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5	280-36180-2	N	7471B	7471B	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5MS	280-36180-2MS	MS	3050B	6010C	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5MS	280-36180-2MS	MS	3050B	6020A	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5MS	280-36180-2MS	MS	3546	8082A	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5MSD	280-36180-2MSD	MSD	3050B	6010C	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5MSD	280-36180-2MSD	MSD	3050B	6020A	III
20-Nov-2012	SL-681-SA6-SB-0.0-0.5MSD	280-36180-2MSD	MSD	3546	8082A	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-3	N	3546	8270C SIM	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-3	N	3550C	8015B EFH	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-4	N	3050B	6010C	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-4	N	3050B	6020A	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-4	N	3546	8081B	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-4	N	3546	8082A	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-4	N	7471B	7471B	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-4	N	8151A	8151A	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5MS	280-36180-4MS	MS	3546	8081B	III
20-Nov-2012	SL-680-SA6-SB-0.0-0.5MSD	280-36180-4MSD	MSD	3546	8081B	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5	280-36180-5	N	3546	8270C SIM	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5	280-36180-5	N	3550C	8015B EFH	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5MS	280-36180-5MS	MS	3546	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-Nov-2012	SL-678-SA6-SB-2.5-3.5MSD	280-36180-5MSD	MSD	3546	8270C SIM	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5	280-36180-6	N	3050B	6010C	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5	280-36180-6	N	3050B	6020A	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5	280-36180-6	N	3546	8082A	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5	280-36180-6	N	7471B	7471B	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5MS	280-36180-6MS	MS	3546	8082A	III
20-Nov-2012	SL-678-SA6-SB-2.5-3.5MSD	280-36180-6MSD	MSD	3546	8082A	III
20-Nov-2012	EB-112012	280-36180-9	EB	3010A	6010C	III
20-Nov-2012	EB-112012	280-36180-9	EB	3020A	6020A	III
20-Nov-2012	EB-112012	280-36180-9	EB	3510C	8015B EFH	III
20-Nov-2012	EB-112012	280-36180-9	EB	3510C	8081B	III
20-Nov-2012	EB-112012	280-36180-9	EB	3510C	8082A	III
20-Nov-2012	EB-112012	280-36180-9	EB	3510C	8270C SIM	III
20-Nov-2012	EB-112012	280-36180-9	EB	7470A	7470A	III
20-Nov-2012	EB-112012	280-36180-9	EB	8151A	8151A	III
20-Nov-2012	EB-112012	280-36180-9	EB	METHOD	8015B GRO	III
20-Nov-2012	EB-112012MS	280-36180-9MS	MS	3020A	6020A	III
20-Nov-2012	EB-112012MSD	280-36180-9MSD	MSD	3020A	6020A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-1 **Laboratory:** TA DEN

EDD Filename: 280-36180-1 **eQAPP Name:** CDM_SSFL_120907_TA

Method Category: METALS
Method: 6010C **Matrix:** AQ

Sample ID: EB-112012 **Collected:** 11/20/2012 3:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0055	J	0.0044	MDL	0.10	MRL	mg/L	J	Z
MANGANESE	0.00051	J	0.00025	MDL	0.010	MRL	mg/L	J	Z
SODIUM	0.17	J B	0.092	MDL	1.0	MRL	mg/L	U	B, B

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

Sample ID: SL-678-SA6-SB-2.5-3.5 **Collected:** 11/20/2012 2:33:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z, A
CALCIUM	2000		15	MDL	52	MRL	mg/Kg	J	A
LITHIUM	21	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MAGNESIUM	4500		3.8	MDL	10	MRL	mg/Kg	J	A
MANGANESE	250	J	0.10	MDL	510	MRL	mg/Kg	J	Z, Q, A
PHOSPHORUS	250		1.7	MDL	10	MRL	mg/Kg	J	A
POTASSIUM	1900	J	42	MDL	6600	MRL	mg/Kg	J	Z, A
SODIUM	150	J	61	MDL	520	MRL	mg/Kg	J	Z
STRONTIUM	19		0.037	MDL	0.51	MRL	mg/Kg	J	A
TIN	1.2	J B	0.94	MDL	11	MRL	mg/Kg	U	B
TITANIUM	940		0.14	MDL	1.0	MRL	mg/Kg	J	A
Zirconium	1.2	J	0.37	MDL	8.9	MRL	mg/Kg	U	B

Sample ID: SL-680-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 11:10:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z, A
BORON	1.7	J	0.96	MDL	9.5	MRL	mg/Kg	U	F
CALCIUM	2100		14	MDL	49	MRL	mg/Kg	J	A
LITHIUM	19	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MAGNESIUM	4000		3.6	MDL	9.8	MRL	mg/Kg	J	A
MANGANESE	240	J	0.098	MDL	480	MRL	mg/Kg	J	Z, Q, A
PHOSPHORUS	410		1.6	MDL	9.8	MRL	mg/Kg	J	A
POTASSIUM	3100	J	40	MDL	6300	MRL	mg/Kg	J	Z, A

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-680-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 11:10:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	120	J	58	MDL	490	MRL	mg/Kg	J	Z
STRONTIUM	15		0.035	MDL	0.48	MRL	mg/Kg	J	A
TIN	1.5	J B	0.89	MDL	11	MRL	mg/Kg	U	B
TITANIUM	870		0.14	MDL	0.97	MRL	mg/Kg	J	A
Zirconium	1.1	J	0.35	MDL	8.4	MRL	mg/Kg	U	B

Sample ID: SL-681-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 10:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	7900	J	1.4	MDL	19000	MRL	mg/Kg	J	Z, A
BORON	1.8	J	0.91	MDL	9.0	MRL	mg/Kg	U	F
CALCIUM	2000		13	MDL	46	MRL	mg/Kg	J	A
LITHIUM	14	J	0.28	MDL	34	MRL	mg/Kg	J	Z
MAGNESIUM	3300		3.4	MDL	9.3	MRL	mg/Kg	J	A
MANGANESE	180	J	0.093	MDL	460	MRL	mg/Kg	J	Z, Q, A
PHOSPHORUS	430		1.5	MDL	9.3	MRL	mg/Kg	J	A
POTASSIUM	2400	J	38	MDL	5900	MRL	mg/Kg	J	Z, A
SODIUM	130	J	55	MDL	460	MRL	mg/Kg	J	Z
STRONTIUM	13		0.033	MDL	0.46	MRL	mg/Kg	J	A
TIN	1.3	J B	0.85	MDL	10	MRL	mg/Kg	U	B
TITANIUM	680		0.13	MDL	0.92	MRL	mg/Kg	J	A
Zirconium	0.75	J	0.33	MDL	8.0	MRL	mg/Kg	U	B

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-678-SA6-SB-2.5-3.5 **Collected:** 11/20/2012 2:33:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.013	U	0.013	MDL	7.8	MRL	mg/Kg	UJ	Q
ARSENIC	3.5	J	0.045	MDL	13	MRL	mg/Kg	J	Z
BARIUM	85	J	0.063	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.56	J	0.020	MDL	0.98	MRL	mg/Kg	J	Z
CADMIUM	0.096	J	0.0084	MDL	0.89	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-678-SA6-SB-2.5-3.5 **Collected:** 11/20/2012 2:33:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	19	J B	0.068	MDL	33	MRL	mg/Kg	J	Z, Q, E
COBALT	5.5	J	0.0059	MDL	19	MRL	mg/Kg	J	Z
COPPER	5.7	J	0.064	MDL	26	MRL	mg/Kg	J	Z, Q, E
LEAD	4.6	J	0.016	MDL	30	MRL	mg/Kg	J	Z, Q
MOLYBDENUM	0.37	J	0.016	MDL	4.7	MRL	mg/Kg	J	Z, Q, E
NICKEL	9.8	J B	0.023	MDL	26	MRL	mg/Kg	J	Z, Q
SELENIUM	0.86	B	0.12	MDL	0.59	MRL	mg/Kg	J	Q, E
SILVER	0.040	J	0.018	MDL	0.71	MRL	mg/Kg	J	Z
THALLIUM	0.22	J	0.0031	MDL	0.41	MRL	mg/Kg	J	Z
VANADIUM	35	J	0.034	MDL	55	MRL	mg/Kg	J	Z, Q
ZINC	41	J	0.28	MDL	98	MRL	mg/Kg	J	Z

Sample ID: SL-680-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 11:10:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.061	J	0.014	MDL	8.4	MRL	mg/Kg	J	Z, Q
ARSENIC	3.9	J	0.049	MDL	15	MRL	mg/Kg	J	Z
BARIUM	80	J	0.068	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.43	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	20	J B	0.074	MDL	36	MRL	mg/Kg	J	Z, Q, E
COBALT	4.7	J	0.0064	MDL	20	MRL	mg/Kg	J	Z
COPPER	15	J	0.069	MDL	28	MRL	mg/Kg	J	Z, Q, E
LEAD	52		0.018	MDL	33	MRL	mg/Kg	J	Q
MOLYBDENUM	1.1	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z, Q, E
NICKEL	24	J B	0.025	MDL	28	MRL	mg/Kg	J	Z, Q
SELENIUM	0.77	B	0.13	MDL	0.64	MRL	mg/Kg	UJ	Q, E, B
THALLIUM	0.21	J	0.0034	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	29	J	0.037	MDL	60	MRL	mg/Kg	J	Z, Q

Sample ID: SL-681-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 10:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.059	J	0.015	MDL	9.1	MRL	mg/Kg	J	Z, Q
ARSENIC	3.2	J	0.053	MDL	16	MRL	mg/Kg	J	Z
BARIUM	82	J	0.074	MDL	150	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Sample ID: SL-681-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 10:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.40	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CHROMIUM	17	J B	0.080	MDL	39	MRL	mg/Kg	J	Z, Q, E
COBALT	4.7	J	0.0070	MDL	22	MRL	mg/Kg	J	Z
COPPER	16	J	0.075	MDL	30	MRL	mg/Kg	J	Z, Q, E
LEAD	34	J	0.019	MDL	36	MRL	mg/Kg	J	Z, Q
MOLYBDENUM	0.73	J	0.018	MDL	5.6	MRL	mg/Kg	J	Z, Q, E
NICKEL	18	J B	0.027	MDL	30	MRL	mg/Kg	J	Z, Q
SELENIUM	0.80	B	0.14	MDL	0.69	MRL	mg/Kg	UJ	Q, E, B
THALLIUM	0.21	J	0.0037	MDL	0.48	MRL	mg/Kg	J	Z
VANADIUM	26	J	0.040	MDL	65	MRL	mg/Kg	J	Z, Q

Method Category: METALS
Method: 7470A **Matrix: AQ**

Sample ID: EB-112012 **Collected:** 11/20/2012 3:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000034	J B	0.000027	MDL	0.00020	MRL	mg/L	U	B, B

Method Category: SVOA
Method: 8015B EFH **Matrix: SO**

Sample ID: SL-678-SA6-SB-2.5-3.5 **Collected:** 11/20/2012 2:33:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C30-C40)	9.5	J	1.1	MDL	11	MRL	mg/Kg	J	Z

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

Sample ID: SL-680-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 11:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	13	J p	6.0	MDL	33	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Sample ID: SL-680-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 11:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	7.7	J p	2.7	MDL	17	MRL	ug/Kg	J	Z

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

Sample ID: EB-112012 **Collected:** 11/20/2012 3:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.0055	J	0.0052	MDL	0.10	MRL	ug/L	J	Z
NAPHTHALENE	0.091	J	0.0054	MDL	0.10	MRL	ug/L	J	Z

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

Sample ID: SL-678-SA6-SB-2.5-3.5 **Collected:** 11/20/2012 2:33:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.40	J B	0.33	MDL	11	MRL	ug/Kg	U	B
NAPHTHALENE	0.50	J B	0.34	MDL	11	MRL	ug/Kg	U	B

Sample ID: SL-680-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 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
1-METHYLNAPHTHALENE	1.3	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	2.6	J B	0.32	MDL	10	MRL	ug/Kg	U	B
ACENAPHTHENE	1.9	J	0.17	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	2.0	J	0.18	MDL	10	MRL	ug/Kg	J	Z
ANTHRACENE	4.3	J	0.75	MDL	10	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	3.6	J	1.4	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	1.3	J	0.49	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	3.8	J B	0.34	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Sample ID: SL-681-SA6-SB-0.0-0.5 **Collected:** 11/20/2012 10:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.5	J	0.29	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	2.7	J B	0.34	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHENE	1.2	J	0.18	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	1.6	J	0.19	MDL	11	MRL	ug/Kg	J	Z
ANTHRACENE	3.5	J	0.80	MDL	11	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	4.8	J	1.4	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	1.1	J	0.52	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	2.3	J B	0.36	MDL	11	MRL	ug/Kg	J	Z

Method Category: VOA
Method: 8015B GRO **Matrix:** AQ

Sample ID: EB-112012 **Collected:** 11/20/2012 3:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C4-C12)	14	J	10	MDL	25	MRL	ug/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-1

Laboratory: TA DEN

EDD Filename: 280-36180-1

eQAPP Name: CDM_SSFL_120907_TA

Reason Code Legend

Reason Code	*Description*
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Matrix Spike Precision
F	Equipment Blank Contamination
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36180-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149565/1-A	12/1/2012 1:26:00 AM	SODIUM	0.134 mg/L	EB-112012

The 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-112012(RES/TOT)	SODIUM	0.17 mg/L	0.17U mg/L

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149235/1-A	12/1/2012 12:33:00 AM	TIN	0.953 mg/Kg	SL-678-SA6-SB-2.5-3.5 SL-680-SA6-SB-0.0-0.5 SL-681-SA6-SB-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-678-SA6-SB-2.5-3.5(RES/TOT)	TIN	1.2 mg/Kg	1.2U mg/Kg
SL-680-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.5 mg/Kg	1.5U mg/Kg
SL-681-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.3 mg/Kg	1.3U mg/Kg

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149234/1-A	11/30/2012 4:02:00 PM	CHROMIUM NICKEL SELENIUM	0.228 mg/Kg 0.0555 mg/Kg 0.162 mg/Kg	SL-678-SA6-SB-2.5-3.5 SL-680-SA6-SB-0.0-0.5 SL-681-SA6-SB-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-680-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.77 mg/Kg	0.77U mg/Kg
SL-681-SA6-SB-0.0-0.5(RES/TOT)	SELENIUM	0.80 mg/Kg	0.80U mg/Kg

Method: 7470A
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149367/1-A	11/28/2012 10:57:00 PM	MERCURY	0.0000350 mg/L	EB-112012

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 7470A
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB-112012(RES/TOT)	MERCURY	0.000034 mg/L	0.000034U mg/L

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149136/1-A	11/29/2012 10:51:00 AM	BENZO(A)ANTHRACENE	0.0360 ug/L	EB-112012
		BENZO(A)PYRENE	0.0227 ug/L	
		BENZO(B)FLUORANTHENE	0.0337 ug/L	
		BENZO(G,H,I)PERYLENE	0.0327 ug/L	
		BENZO(K)FLUORANTHENE	0.0329 ug/L	
		CHRYSENE	0.0363 ug/L	
		DIBENZO(A,H)ANTHRACENE	0.0320 ug/L	
		FLUORANTHENE	0.0289 ug/L	
		INDENO(1,2,3-CD)PYRENE	0.0313 ug/L	

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149356/1-A	12/3/2012 5:09:00 PM	2-METHYLNAPHTHALENE	0.534 ug/Kg	SL-678-SA6-SB-2.5-3.5
		NAPHTHALENE	0.418 ug/Kg	SL-680-SA6-SB-0.0-0.5
				SL-681-SA6-SB-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-678-SA6-SB-2.5-3.5(RES)	2-METHYLNAPHTHALENE	0.40 ug/Kg	11U ug/Kg
SL-678-SA6-SB-2.5-3.5(RES)	NAPHTHALENE	0.50 ug/Kg	11U ug/Kg
SL-680-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	2.6 ug/Kg	10U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-36180-1

Laboratory: TA DEN

EDD Filename: 280-36180-1

eQAPP Name: CDM_SSFL_120907_TA

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-112012(RES/TOT)	11/20/2012 3:00:00 PM	BORON MANGANESE SODIUM	0.0055 mg/L 0.00051 mg/L 0.17 mg/L	SL-678-SA6-SB-2.5-3.5 SL-680-SA6-SB-0.0-0.5 SL-681-SA6-SB-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-680-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.7 mg/Kg	1.7U mg/Kg
SL-681-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.8 mg/Kg	1.8U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8081B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-680-SA6-SB-0.0-0.5MS (SL-680-SA6-SB-0.0-0.5)	ALDRIN BETA-BHC	120 117	- -	63.00-115.00 67.00-115.00	- -	ALDRIN BETA-BHC	No Qual, Diluted Out
SL-680-SA6-SB-0.0-0.5MS SL-680-SA6-SB-0.0-0.5MSD (SL-680-SA6-SB-0.0-0.5)	TOXAPHENE	0	0	19.00-174.00	-	TOXAPHENE	No Qual Diluted Out

Method: 8082A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-681-SA6-SB-0.0-0.5MS SL-681-SA6-SB-0.0-0.5MSD (SL-681-SA6-SB-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	0 0	0 0	54.00-132.00 20.00-160.00	- -	AROCLOR 1016 AROCLOR 1260	No Qual, Diluted Out

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-681-SA6-SB-0.0-0.5MS (TOT) (SL-678-SA6-SB-2.5-3.5 SL-680-SA6-SB-0.0-0.5 SL-681-SA6-SB-0.0-0.5)	NICKEL	149	-	75.00-125.00	-	NICKEL	J(all detects)
SL-681-SA6-SB-0.0-0.5MS (TOT) SL-681-SA6-SB-0.0-0.5MSD (TOT) (SL-678-SA6-SB-2.5-3.5 SL-680-SA6-SB-0.0-0.5 SL-681-SA6-SB-0.0-0.5)	ANTIMONY BARIUM ZINC	7 - 59	8 25 -54	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ANTIMONY BARIUM ZINC	J(all detects) UJ(all non-detects) Ba, Zn, No Qual, >4x Sb Post Spike = 104%
SL-681-SA6-SB-0.0-0.5MSD (TOT) (SL-678-SA6-SB-2.5-3.5 SL-680-SA6-SB-0.0-0.5 SL-681-SA6-SB-0.0-0.5)	CHROMIUM COPPER LEAD MOLYBDENUM SELENIUM VANADIUM	- - - - - -	490 172 37 162 73 68	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	103 (20.00) 42 (20.00) - 59 (20.00) 28 (20.00) -	CHROMIUM COPPER LEAD MOLYBDENUM SELENIUM VANADIUM	J(all detects) UJ(all non-detects)

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-681-SA6-SB-0.0-0.5MS (TOT) SL-681-SA6-SB-0.0-0.5MSD (TOT) (SL-678-SA6-SB-2.5-3.5 SL-680-SA6-SB-0.0-0.5 SL-681-SA6-SB-0.0-0.5)	ALUMINUM IRON MANGANESE TITANIUM	1989 311 140 291	1696 - - 267	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM IRON MANGANESE TITANIUM	J(all detects) Al, Fe, Ti, No Qual, >4x

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-112012	BORON	J	0.0055	0.10	MRL	mg/L	J (all detects)
	MANGANESE	J	0.00051	0.010	MRL	mg/L	
	SODIUM	J B	0.17	1.0	MRL	mg/L	

Method: 7470A
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-112012	MERCURY	J B	0.000034	0.00020	MRL	mg/L	J (all detects)

Method: 8015B GRO
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-112012	GASOLINE RANGE ORGANICS (C4-C12)	J	14	25	MRL	ug/L	J (all detects)

Method: 8270C SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-112012	2-METHYLNAPHTHALENE	J	0.0055	0.10	MRL	ug/L	J (all detects)
	NAPHTHALENE	J	0.091	0.10	MRL	ug/L	

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-678-SA6-SB-2.5-3.5	ALUMINUM	J	15000	21000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	21	38	MRL	mg/Kg	
	MANGANESE	J	250	510	MRL	mg/Kg	
	POTASSIUM	J	1900	6600	MRL	mg/Kg	
	SODIUM	J	150	520	MRL	mg/Kg	
	TIN	J B	1.2	11	MRL	mg/Kg	
	Zirconium	J	1.2	8.9	MRL	mg/Kg	
SL-680-SA6-SB-0.0-0.5	ALUMINUM	J	12000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	1.7	9.5	MRL	mg/Kg	
	LITHIUM	J	19	36	MRL	mg/Kg	
	MANGANESE	J	240	480	MRL	mg/Kg	
	POTASSIUM	J	3100	6300	MRL	mg/Kg	
	SODIUM	J	120	490	MRL	mg/Kg	
	TIN	J B	1.5	11	MRL	mg/Kg	
	Zirconium	J	1.1	8.4	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-681-SA6-SB-0.0-0.5	ALUMINUM	J	7900	19000	MRL	mg/Kg	J (all detects)
	BORON	J	1.8	9.0	MRL	mg/Kg	
	LITHIUM	J	14	34	MRL	mg/Kg	
	MANGANESE	J	180	460	MRL	mg/Kg	
	POTASSIUM	J	2400	5900	MRL	mg/Kg	
	SODIUM	J	130	460	MRL	mg/Kg	
	TIN	J B	1.3	10	MRL	mg/Kg	
	Zirconium	J	0.75	8.0	MRL	mg/Kg	

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-678-SA6-SB-2.5-3.5	ARSENIC	J	3.5	13	MRL	mg/Kg	J (all detects)
	BARIUM	J	85	130	MRL	mg/Kg	
	BERYLLIUM	J	0.56	0.98	MRL	mg/Kg	
	CADMIUM	J	0.096	0.89	MRL	mg/Kg	
	CHROMIUM	J B	19	33	MRL	mg/Kg	
	COBALT	J	5.5	19	MRL	mg/Kg	
	COPPER	J	5.7	26	MRL	mg/Kg	
	LEAD	J	4.6	30	MRL	mg/Kg	
	MOLYBDENUM	J	0.37	4.7	MRL	mg/Kg	
	NICKEL	J B	9.8	26	MRL	mg/Kg	
	SILVER	J	0.040	0.71	MRL	mg/Kg	
	THALLIUM	J	0.22	0.41	MRL	mg/Kg	
	VANADIUM	J	35	55	MRL	mg/Kg	
	ZINC	J	41	98	MRL	mg/Kg	
SL-680-SA6-SB-0.0-0.5	ANTIMONY	J	0.061	8.4	MRL	mg/Kg	J (all detects)
	ARSENIC	J	3.9	15	MRL	mg/Kg	
	BARIUM	J	80	140	MRL	mg/Kg	
	BERYLLIUM	J	0.43	1.1	MRL	mg/Kg	
	CHROMIUM	J B	20	36	MRL	mg/Kg	
	COBALT	J	4.7	20	MRL	mg/Kg	
	COPPER	J	15	28	MRL	mg/Kg	
	MOLYBDENUM	J	1.1	5.1	MRL	mg/Kg	
	NICKEL	J B	24	28	MRL	mg/Kg	
	THALLIUM	J	0.21	0.45	MRL	mg/Kg	
	VANADIUM	J	29	60	MRL	mg/Kg	
SL-681-SA6-SB-0.0-0.5	ANTIMONY	J	0.059	9.1	MRL	mg/Kg	J (all detects)
	ARSENIC	J	3.2	16	MRL	mg/Kg	
	BARIUM	J	82	150	MRL	mg/Kg	
	BERYLLIUM	J	0.40	1.2	MRL	mg/Kg	
	CHROMIUM	J B	17	39	MRL	mg/Kg	
	COBALT	J	4.7	22	MRL	mg/Kg	
	COPPER	J	16	30	MRL	mg/Kg	
	LEAD	J	34	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.73	5.6	MRL	mg/Kg	
	NICKEL	J B	18	30	MRL	mg/Kg	
	THALLIUM	J	0.21	0.48	MRL	mg/Kg	
	VANADIUM	J	26	65	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36180-1 **Laboratory: TA DEN**

EDD Filename: 280-36180-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-678-SA6-SB-2.5-3.5	EFH(C30-C40)	J	9.5	11	MRL	mg/Kg	J (all detects)

Method: 8081B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-680-SA6-SB-0.0-0.5	4,4'-DDT	J p	13	33	MRL	ug/Kg	J (all detects)
	MIREX	J p	7.7	17	MRL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-678-SA6-SB-2.5-3.5	2-METHYLNAPHTHALENE	J B	0.40	11	MRL	ug/Kg	J (all detects)
	NAPHTHALENE	J B	0.50	11	MRL	ug/Kg	
SL-680-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.3	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J B	2.6	10	MRL	ug/Kg	
	ACENAPHTHENE	J	1.9	10	MRL	ug/Kg	
	ACENAPHTHYLENE	J	2.0	10	MRL	ug/Kg	
	ANTHRACENE	J	4.3	10	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	3.6	10	MRL	ug/Kg	
	FLUORENE	J	1.3	10	MRL	ug/Kg	
	NAPHTHALENE	J B	3.8	10	MRL	ug/Kg	
SL-681-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.5	11	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J B	2.7	11	MRL	ug/Kg	
	ACENAPHTHENE	J	1.2	11	MRL	ug/Kg	
	ACENAPHTHYLENE	J	1.6	11	MRL	ug/Kg	
	ANTHRACENE	J	3.5	11	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	4.8	11	MRL	ug/Kg	
	FLUORENE	J	1.1	11	MRL	ug/Kg	
	NAPHTHALENE	J B	2.3	11	MRL	ug/Kg	

LDC #: 29419R4
SDG #: 280-36180-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/2/13
Page: 1 of 1
Reviewer: AL
2nd Reviewer: MJ

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/20/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MSD (Al, Fe, Ti, Ba, Zn 74X) Sb PS=104% (J/UJ))
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	A	
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=4 FB = FB-060512 (12F037)

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-681-SA6-SB-0.0-0.5	11		21		31	
2	SL-680-SA6-SB-0.0-0.5	12		22		32	
3	SL-678-SA6-SB-2.5-3.5	13		23		33	
4	EB-112012	14		24		34	
5	SL-681-SA6-SB-0.0-0.5MS (6010 6020)	15		25		35	
6	SL-681-SA6-SB-0.0-0.5MSD	16		26		36	
7	EB-112012MS	17		27		37	
8	EB-112012MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

LDC #: 29419R4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: AL
2nd Reviewer: M

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1								
Na			222	111									
Zr			3.38	1.69	0.75								

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2, 3

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	2	3							
Zr			6.22	3.11	1.1	1.2							

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

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	4								
Na			142	0.71	0.17								
Hg			0.0380	0.00019	0.000034								

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 #: 29419R4

VALIDATION FINDINGS WORKSHEET
Field Blanks

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

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: ~~11/14/12; 11/15/12~~ 11/20/12 Soil factor applied 100x; Hg=83x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification											
	EB-112012 (SDG: 280-36180-1)	Action Limit	1	2									
B	0.0055	2.75	1.8	1.7									
Mn	0.00051	0.255											
Na	0.17	85											
Hg	0.000034	0.017											

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 #: 29419R4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer: M

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 06/05/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification										
	FB-060512 (SDG:12F037)	Action Limit										
Al	0.0270	13.5										
Ca	0.0263	13.15										
Cu	0.000954	0.477										

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".

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

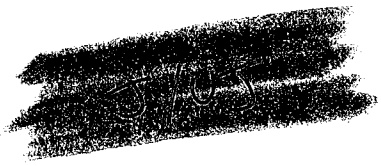
Lab ID: 280-36180-2

SDG No:

Lab Name: TestAmerica Denver Job No: 280-36180-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	7900	J	9200	J	17	V	6010C
Boron	1.8	J	ND		NC		6010C
Calcium	2000		2290		16	V	6010C
Iron	16000		16000		0.57		6010C
Lithium	14	J	15.9	J	NC		6010C
Magnesium	3300		3800		15	V	6010C
Manganese	180	J	204	J	14	V	6010C
Phosphorus	430		487		14	V	6010C
Potassium	2400	J	2820	J	15	V	6010C
Sodium	130	J	ND		NC		6010C
Strontium	13		14.4		14	V	6010C
Tin	1.3	J	ND		NC		6010C
Titanium	680		766		12	V	6010C
Zirconium	0.75	J	ND		NC		6010C



Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

SAMPLE DELIVERY GROUP

280-36180-2

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-Nov-2012	SL-681-SA6-SB-0.0-0.5	280-36180-2	N	1613	1613B	IV
20-Nov-2012	SL-680-SA6-SB-0.0-0.5	280-36180-4	N	1613	1613B	IV
20-Nov-2012	SL-678-SA6-SB-2.5-3.5	280-36180-6	N	1613	1613B	III
20-Nov-2012	EB-112012	280-36180-9	EB	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36180-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA
Method: 1613B **Matrix:** AQ

Sample ID: EB-112012 *Collected:* 11/20/2012 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	2.4	B J	0.91	MDL	100	MRL	pg/L	U	B

Method Category: SVOA
Method: 1613B **Matrix:** SO

Sample ID: SL-678-SA6-SB-2.5-3.5 *Collected:* 11/20/2012 2:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.3	J	0.060	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.50	Q J	0.042	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.062	J	0.028	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.12	J	0.059	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.062	Q J	0.028	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.17	Q J	0.060	MDL	5.4	MRL	ng/kg	J	Z
OCDF	1.3	J	0.062	MDL	11	MRL	ng/kg	J	Z

Sample ID: SL-680-SA6-SB-0.0-0.5 *Collected:* 11/20/2012 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	3.0	J	0.084	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	1.6	Q J	0.082	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	3.1	Q J	0.043	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.15	Q J	0.054	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	1.1	Q J	0.078	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	1.3	J	0.090	MDL	5.4	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	1.9	J	0.045	MDL	5.4	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	1.8	J	0.080	MDL	5.4	MRL	ng/kg	J	Z

Sample ID: SL-681-SA6-SB-0.0-0.5 *Collected:* 11/20/2012 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.5	J	0.085	MDL	5.6	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36180-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B *Matrix:* SO

Sample ID: SL-681-SA6-SB-0.0-0.5 *Collected:* 11/20/2012 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	1.4	J	0.073	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	2.6	Q J	0.042	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	3.7	J	0.080	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	2.0	Q J	0.038	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	4.2	C J	0.072	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.099	Q J	0.053	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.94	Q J	0.080	MDL	5.6	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.79	J	0.077	MDL	5.6	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	1.1	J	0.041	MDL	5.6	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	1.3	J	0.066	MDL	5.6	MRL	ng/kg	J	Z
2,3,7,8-TCDD	0.17	Q J	0.13	MDL	1.1	MRL	ng/kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36180-2

Laboratory: TA DEN

EDD Filename: Prep280-36180-2

eQAPP Name: CDM_SSFL_120907_TA

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
L	Laboratory Control Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36180-2/
H2K270411

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36180-2 **Laboratory: TA DEN**

EDD Filename: 280-36180-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2K300000019B	12/7/2012 2:46:00 PM	OCDD	3.0 pg/L	EB-112012

The 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-112012(RES)	OCDD	2.4 pg/L	2.4U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2K290000015B	12/6/2012 11:21:00 AM	OCDD	0.27 ng/kg	SL-678-SA6-SB-2.5-3.5 SL-680-SA6-SB-0.0-0.5 SL-681-SA6-SB-0.0-0.5

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36180-2 **Laboratory: TA DEN**

EDD Filename: 280-36180-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
H2K300000019C (EB-112012)	1,2,3,7,8,9-HXCDD	188	-	60.00-150.00	-	1,2,3,7,8,9-HXCDD	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36180-2 **Laboratory: TA DEN**

EDD Filename: 280-36180-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-112012	OCDD	B J	2.4	100	MRL	pg/L	J (all detects)

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-678-SA6-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	J	2.3	5.4	MRL	ng/kg	
	1,2,3,4,6,7,8-HPCDF	Q J	0.50	5.4	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.062	5.4	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.12	5.4	MRL	ng/kg	J (all detects)
	1,2,3,6,7,8-HXCDF	Q J	0.062	5.4	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.17	5.4	MRL	ng/kg	
	OCDF	J	1.3	11	MRL	ng/kg	
SL-680-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	3.0	5.4	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	1.6	5.4	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	3.1	5.4	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.15	5.4	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	1.1	5.4	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	1.3	5.4	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	1.9	5.4	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	1.8	5.4	MRL	ng/kg	
SL-681-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	1.5	5.6	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	1.4	5.6	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	2.6	5.6	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	3.7	5.6	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	2.0	5.6	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	4.2	5.6	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDF	Q J	0.099	5.6	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.94	5.6	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.79	5.6	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	1.1	5.6	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	1.3	5.6	MRL	ng/kg	
	2,3,7,8-TCDD	Q J	0.17	1.1	MRL	ng/kg	

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	November 20, 2012
LDC Report Date:	May 1, 2013
Matrix:	Soil
Parameters:	Dioxins/Dibenzofurans
Validation Level:	Level IV
Laboratory:	TestAmerica, Inc.
Sample Delivery Group (SDG):	280-36180-2/H2K270411

Sample Identification

SL-681-SA6-SB-0.0-0.5
SL-680-SA6-SB-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 Method 1613B for Polychlorinated Dioxins/Dibenzofurans.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and the USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005).

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

The following are definitions of the data qualifiers:

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

J Indicates an estimated value.

R Quality control indicates the data is not usable.

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

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

A Indicates the finding is based upon technical validation criteria.

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

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

I. Technical Holding Times

All technical holding time requirements were met.

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

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

The chromatographic resolution between 2,3,7,8-TCDD and the peaks representing any other unlabeled TCDD isomers was resolved with a valley of less than or equal to 25%.

PFK and static resolving power were within validation criteria.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 35.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

The minimum S/N ratio was greater than or equal to 10 for each unlabeled compound and labeled compound.

IV. 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 within QC limits.

The percent differences (%D) of the second source calibration standard were within QC limits.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated dioxin/dibenzofuran contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
H2K290000-015	11/29/12	OCDD	0.27 ng/Kg	All samples in SDG 280-36180-2/ H2K270411

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.

Sample EB-112012 was identified as an equipment blank. No polychlorinated dioxin/dibenzofuran contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB-112012	11/20/12	OCDD	2.4 pg/L	All samples in SDG 280-36180-2/H2K270411

Sample FB-060512 (from SDG PH011) was identified as a field blank. No polychlorinated dioxin/dibenzofuran contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
FB-060512	6/5/12	1,2,3,7,8-PeCDF 2,3,7,8-TCDF	0.142 pg/L 0.208 pg/L	All samples in SDG 280-36180-2/H2K270411

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. 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 (LCS)

Laboratory control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries were within QC limits.

X. Target Compound Identifications

All target compound identifications were within validation criteria.

XI. Compound Quantitation

All compound quantitations were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 280-36180-2/ H2K270411	All compounds reported below the RL.	J (all detects)	A

Results for sample SL-681-SA6-SB-0.0-0.5 were flagged "S" by the laboratory to indicate that ion suppression was evident. However, the ion ratios were within the QC limit and no data was qualified.

XII. System Performance

The system performance was acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Data Qualification Summary - SDG 280-36180-2/H2K270411

SDG	Sample	Compound	Flag	A or P	Reason (Code)
280-36180-2/ H2K270411	SL-681-SA6-SB-0.0-0.5 SL-680-SA6-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG 280-36180-2/H2K270411

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG 280-36180-2/H2K270411

No Sample Data Qualified in this SDG

LDC #: 29491A21 **VALIDATION COMPLETENESS WORKSHEET** Date: 4-25-13

SDG #: 280-36180-2/H2K270411 Level IV Page: 1 of 1

Laboratory: Test America, Inc. Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 11-20-12
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	≤ 20/35
IV.	Continuing Calibration	A	QC limits
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client
VII.	Laboratory control samples	A	LCS
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	A	
XI.	Compound quantitation/RL/LOQ/LODs	~~A~~	
XII.	System performance	A	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	SW	EB=112012 (280-36180-3 H2K270411); FB=D100512-(PH011)

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-681-SA6-SB-0.0-0.5	11	H2K290000-015	21		31	
2	SL-680-SA6-SB-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 #: 29491A21

VALIDATION FINDINGS CHECKLIST

Reviewer: 1m
2nd Reviewer: 9

Method: Dioxins/Dibenzofurans (EPA Method 1613B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Was PFK exact mass 380.9760 verified?	✓			
Were the retention time windows established for all homologues?	✓			
Was the chromatographic resolution between 2,3,7,8-TCDD and peaks representing any other unlabeled TCDD isomers ≤ 25% ?	✓			
Is the static resolving power at least 10,000 (10% valley definition)?	✓			
Was the mass resolution adequately check with PFK?	✓			
Was the presence of 1,2,8,9-TCDD and 1,3,4,6,8-PeCDF verified?	✓			
III. Initial calibration				
Was the initial calibration performed at 5 concentration levels?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20% for unlabeled compounds and ≤ 35% for labeled compounds ?	✓			
Did all calibration standards meet the Ion Abundance Ratio criteria?	✓			
Was the signal to noise ratio for each target compound ≥ 2.5 and for each recovery and internal standard ≥ 10?	✓			
IV. Continuing calibration				
Was a routine calibration performed at the beginning and end of each 12 hour period?	✓			
Were all the concentrations for the unlabeled compounds and labeled compounds within the QC limits (Method 1613B, Table 6)?	✓			
Did all routine calibration standards meet the Ion Abundance Ratio criteria?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank performed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			

LDC #: 29491A21

VALIDATION FINDINGS CHECKLIST

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

Validation Area	Yes	No	NA	Findings/Comments
VIII. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
IX. Internal standards				
Were internal standard recoveries within the 25-150% criteria?	✓			
Was the minimum S/N ratio of all internal standard peaks ≥ 10?	✓			
X. Target compound identification				
For 2,3,7,8 substituted congeners with associated labeled standards, were the retention times of the two quantitation peaks within -1 to 3 sec. of the RT of the labeled standard?	✓			
For 2,3,7,8 substituted congeners without associated labeled standards, were the relative retention times of the two quantitation peaks within 0.005 time units of the RRT measured in the routine calibration?	✓			
For non-2,3,7,8 substituted congeners, were the retention times of the two quantitation peaks within RT established in the performance check solution?	✓			
Did compound spectra contain all characteristic ions listed in the table attached?	✓			
Was the Ion Abundance Ratio for the two quantitation ions within criteria?		✓		
Was the signal to noise ratio for each target compound and labeled standard ≥ 2.5?	✓			
Does the maximum intensity of each specified characteristic ion coincide within ± 2 seconds (includes labeled standards)?	✓			
For PCDF identification, was any signal (S/N ≥ 2.5, at ± seconds RT) detected in the corresponding PCDPE channel?		✓		
Was an acceptable lock mass recorded and monitored?	✓			
XI. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

A. 2,3,7,8-TCDD	F. 1,2,3,4,6,7,8-HpCDD	K. 1,2,3,4,7,8-HxCDF	P. 1,2,3,4,7,8,9-HpCDF	U. Total HpCDD
B. 1,2,3,7,8-PeCDD	G. OCDD	L. 1,2,3,6,7,8-HxCDF	Q. OCDF	V. Total TCDF
C. 1,2,3,4,7,8-HxCDD	H. 2,3,7,8-TCDF	M. 2,3,4,6,7,8-HxCDF	R. Total TCDD	W. Total PeCDF
D. 1,2,3,6,7,8-HxCDD	I. 1,2,3,7,8-PeCDF	N. 1,2,3,7,8,9-HxCDF	S. Total PeCDD	X. Total HxCDF
E. 1,2,3,7,8,9-HxCDD	J. 2,3,4,7,8-PeCDF	O. 1,2,3,4,6,7,8-HpCDF	T. Total HxCDD	Y. Total HpCDF

Notes:

LDC #: 29491A21

VALIDATION FINDINGS WORKSHEET
Blanks

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

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was method blank contamination less < CRQL for all target compounds?

Blank extraction date: 11/29/12 **Blank analysis date:** 12/06/12 **Associated samples:** All >5x

Conc. units: ng/kg

Compound	Blank ID	Sample Identification								
	H2K290000-015	5x								
G	0.27	1.35								

*EMPC

LDC #: 29491A21

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins (EPA Method 1613B)

Blank units: pg/L **Associated sample units:** pg/g (ng/kg)
Sampling date: 06/05/12
Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: All >5x

Compound	Blank ID	Sample Identification								
	FB-060512	5X								
I	0.142	0.71	~~0.00071~~							
H	0.208	1.04	~~0.00104~~							

* EMPC

FB-060512 (PH011)

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".

P:\CDM_SSFL_FB.wpd

LDC #: 29491A21

VALIDATION FINDINGS WORKSHEET
Field Blanks

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

METHOD: HRGC/HRMS Dioxins (EPA Method 1613B)

Blank units: pg/L **Associated sample units:** pg/g (ng/kg)
Sampling date: 11/20/12
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All >5x

Compound	Blank ID	Sample Identification								
	EB-112012	5X								
G	2.4	12								

* EMPC

EB-112012 (280-36180-2/H2K270411)

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".

P:\CDM_SSFL_EB.wpd

LDC #: 29491-A2

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: 9r
2nd Reviewer: 4

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?
Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		~~All~~ 1	~~Results~~ was flagged "S" by Lab to indicate that ion suppression was evident. However the ion ration was within the QC limit no data was qualified		~~J dets/A~~ Text

LDC #: 29491A21

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: YM
2nd Reviewer: YM

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

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

A_x = Area of compound,
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 Average RRF (initial)	Recalculated Average RRF (initial)	Reported RRF (CS3 std)	Recalculated RRF (CS3 std)	Reported %RSD	Recalculated %RSD
1	ICAL (DB-5)	8-22-11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.094	1.094	1.023	1.023	14.7	14.7
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.118	1.118	1.093	1.093	3.7	3.7
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	1.125	1.125	1.078	1.078	7.7	7.7
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.110	1.110	1.093	1.093	6.2	6.25
			OCDF (^{13}C-OCDD)	1.422	1.422	1.362	1.362	3.6	3.6
2	ICAL (DB-225)	11-20-12	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.969	0.969	0.936	0.936	9.2	9.2
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)						
			OCDF (^{13}C-OCDD)						
3			2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)						
			OCDF (^{13}C-OCDD)						

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 #: 29491A21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: CM
2nd Reviewer: JL

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

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

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

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	b121206S1 (DB-5)	12-6-12	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.094	1.083	1.083		
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.118	1.257	1.257		
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	1.125	1.100	1.100		
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.110	1.077	1.077		
			OCDF (^{13}C-OCDD)	1.422	1.393	1.393		
2	b121207S1 (DB-5)	12-7-12	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.094	1.097	1.097		
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.118	1.250	1.250		
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	1.125	1.117	1.117		
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.110	1.098	1.098		
			OCDF (^{13}C-OCDD)	1.422	1.403	1.403		
3	d1212095I (DB-225)	12-9-12	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	0.969	0.881	0.881		
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)					
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)					
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)					
			OCDF (^{13}C-OCDD)					

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

LDC #: 29491A21

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: CM
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (EPA Method 1613B)

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

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

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

LCS ID: H2K290000-015

Compound	Spike Added (ng/Kg)		Spiked Sample Concentration (ng/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
2,3,7,8-TCDD	20.0	NA	21.8	NA	109	109				
1,2,3,7,8-PeCDD	100		109		109	109				
1,2,3,4,7,8-HxCDD	100		104		104	104				
1,2,3,4,7,8,9-HpCDF	100		98.8		99	98.8				
OCDF	200		177		88	88.5				

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 #: 29491A21

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JM
2nd reviewer:

METHOD: HRGC/HRMS Chlorinated Pesticides

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

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

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

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

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

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

RRF = Relative Response Factor (average) from the initial calibration

Df = Dilution Factor.

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

Example:

Sample I.D. 1 , J :

Conc. = $\frac{(47808)(10000)(1)}{(4077663)(1.042)(10.0g)(0.8945)}$

= 1.3 ng/Kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

280-36211-1

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-Nov-2012	SL-688A-SA6-SB-0.0-0.5	280-36211-1	N	3546	8082A	III
21-Nov-2012	SL-688B-SA6-SB-0.0-0.5	280-36211-2	N	3546	8082A	III
21-Nov-2012	SL-688C-SA6-SB-0.0-0.5	280-36211-3	N	3546	8082A	III
21-Nov-2012	SL-688D-SA6-SB-0.0-0.5	280-36211-4	N	3546	8082A	III
21-Nov-2012	SL-688E-SA6-SB-0.0-0.5	280-36211-5	N	3546	8082A	III
21-Nov-2012	SL-688F-SA6-SB-0.0-0.5	280-36211-6	N	3546	8082A	III
21-Nov-2012	SL-683A-SA6-SB-0.0-0.5	280-36211-7	N	3546	8082A	III
21-Nov-2012	SL-683B-SA6-SB-0.0-0.5	280-36211-8	N	3546	8082A	III
21-Nov-2012	SL-683C-SA6-SB-0.0-0.5	280-36211-9	N	3546	8082A	III

III = EPA Level 3 Data Review *N = 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: 280-36211-1 **Laboratory: TA DEN**

EDD Filename: 280-36211-1 **eQAPP Name: CDM_SSFL_120907_TA**

No Data Review Qualifiers Applied.

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36211-1

(No Outliers)

SAMPLE DELIVERY GROUP

280-36278-1

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-Nov-2012	TB-112612	280-36278-1	TB	METHOD	8015B GRO	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-2	N	3546	8270C SIM	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-2	N	3550C	8015B EFH	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-3	N	3050B	6010C	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-3	N	3050B	6020A	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-3	N	3546	8081B	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-3	N	3546	8082A	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-3	N	7471B	7471B	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-3	N	8151A	8151A	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0MS	280-36278-3MS	MS	3050B	6010C	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0MS	280-36278-3MS	MS	3050B	6020A	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0MS	280-36278-3MS	MS	3546	8081B	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0MS	280-36278-3MS	MS	7471B	7471B	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0MSD	280-36278-3MSD	MSD	3050B	6010C	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0MSD	280-36278-3MSD	MSD	3050B	6020A	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0MSD	280-36278-3MSD	MSD	3546	8081B	III
26-Nov-2012	SL-658-SA6-SB-4.0-5.0MSD	280-36278-3MSD	MSD	7471B	7471B	III
26-Nov-2012	SL-658-SA6-SB-4.5	280-36278-4	N	5035	8015B GRO	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5	280-36278-5	N	3546	8270C SIM	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5	280-36278-5	N	3550C	8015B EFH	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5	280-36278-6	N	3050B	6010C	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5	280-36278-6	N	3050B	6020A	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5	280-36278-6	N	3546	8082A	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5	280-36278-6	N	7471B	7471B	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5MS	280-36278-6MS	MS	3546	8082A	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5MSD	280-36278-6MSD	MSD	3546	8082A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-Nov-2012	SL-659-SA6-SB-4.0	280-36278-7	N	5035	8015B GRO	III
26-Nov-2012	SL-676-SA6-SB-3.5-4.5	280-36278-11	N	3546	8270C SIM	III
26-Nov-2012	SL-676-SA6-SB-3.5-4.5	280-36278-11	N	3550C	8015B EFH	III
26-Nov-2012	SL-676-SA6-SB-3.5-4.5	280-36278-12	N	3050B	6010C	III
26-Nov-2012	SL-676-SA6-SB-3.5-4.5	280-36278-12	N	3050B	6020A	III
26-Nov-2012	SL-676-SA6-SB-3.5-4.5	280-36278-12	N	3546	8082A	III
26-Nov-2012	SL-676-SA6-SB-3.5-4.5	280-36278-12	N	7471B	7471B	III
26-Nov-2012	SL-676-SA6-SB-4.0	280-36278-13	N	5035	8015B GRO	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5	280-36278-8	N	3546	8270C SIM	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5	280-36278-8	N	3550C	8015B EFH	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5MS	280-36278-8MS	MS	3550C	8015B EFH	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5MSD	280-36278-8MSD	MSD	3550C	8015B EFH	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5	280-36278-9	N	3050B	6010C	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5	280-36278-9	N	3050B	6020A	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5	280-36278-9	N	3546	8082A	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5	280-36278-9	N	7471B	7471B	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5MS	280-36278-9MS	MS	3546	8082A	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5MSD	280-36278-9MSD	MSD	3546	8082A	III
26-Nov-2012	SL-647-SA6-SB-4.0	280-36278-10	N	5035	8015B GRO	III
26-Nov-2012	SL-648-SA6-SB-6.5-7.5	280-36278-14	N	3546	8270C SIM	III
26-Nov-2012	SL-648-SA6-SB-6.5-7.5	280-36278-14	N	3550C	8015B EFH	III
26-Nov-2012	SL-648-SA6-SB-6.5-7.5	280-36278-15	N	3050B	6010C	III
26-Nov-2012	SL-648-SA6-SB-6.5-7.5	280-36278-15	N	3050B	6020A	III
26-Nov-2012	SL-648-SA6-SB-6.5-7.5	280-36278-15	N	3546	8082A	III
26-Nov-2012	SL-648-SA6-SB-6.5-7.5	280-36278-15	N	7471B	7471B	III
26-Nov-2012	SL-648-SA6-SB-7.0	280-36278-16	N	5035	8015B GRO	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-647-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 2:15:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	160	J	55	MDL	470	MRL	mg/Kg	J	Z

Sample ID: SL-647-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 2:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.4	MDL	19000	MRL	mg/Kg	J	Z
LITHIUM	26	J	0.28	MDL	34	MRL	mg/Kg	J	Z
MANGANESE	190	J	0.093	MDL	460	MRL	mg/Kg	J	Z
POTASSIUM	2000	J	38	MDL	6000	MRL	mg/Kg	J	Z
TIN	1.8	J B	0.85	MDL	10	MRL	mg/Kg	U	B
Zirconium	0.74	J	0.33	MDL	8.0	MRL	mg/Kg	U	F

Sample ID: SL-648-SA6-SB-6.5-7.5 *Collected:* 11/26/2012 3:00:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	130	J	64	MDL	540	MRL	mg/Kg	J	Z

Sample ID: SL-648-SA6-SB-6.5-7.5 *Collected:* 11/26/2012 3:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.7	MDL	22000	MRL	mg/Kg	J	Z
LITHIUM	22	J	0.32	MDL	40	MRL	mg/Kg	J	Z
MANGANESE	280	J	0.11	MDL	530	MRL	mg/Kg	J	Z
POTASSIUM	3100	J	44	MDL	6900	MRL	mg/Kg	J	Z
TIN	1.4	J B	0.98	MDL	12	MRL	mg/Kg	U	B
Zirconium	0.51	J	0.38	MDL	9.3	MRL	mg/Kg	U	F

Sample ID: SL-658-SA6-SB-4.0-5.0 *Collected:* 11/26/2012 9:15:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	120	J	61	MDL	520	MRL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-658-SA6-SB-4.0-5.0 **Collected:** 11/26/2012 9:15:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
BORON	2.4	J	1.0	MDL	10	MRL	mg/Kg	U	F
LITHIUM	18	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	290	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	3600	J	42	MDL	6600	MRL	mg/Kg	J	Z
TIN	1.1	J B	0.94	MDL	11	MRL	mg/Kg	U	B
Zirconium	1.8	J	0.36	MDL	8.9	MRL	mg/Kg	U	F

Sample ID: SL-659-SA6-SB-3.5-4.5 **Collected:** 11/26/2012 10:30:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	100	J	52	MDL	440	MRL	mg/Kg	J	Z

Sample ID: SL-659-SA6-SB-3.5-4.5 **Collected:** 11/26/2012 10:30:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	1.6	J	0.86	MDL	8.5	MRL	mg/Kg	U	F
LITHIUM	21	J	0.26	MDL	32	MRL	mg/Kg	J	Z
MANGANESE	270	J	0.088	MDL	430	MRL	mg/Kg	J	Z
POTASSIUM	2800	J	36	MDL	5600	MRL	mg/Kg	J	Z
TIN	1.1	J B	0.80	MDL	9.6	MRL	mg/Kg	U	B
Zirconium	1.9	J	0.31	MDL	7.5	MRL	mg/Kg	J	Z

Sample ID: SL-676-SA6-SB-3.5-4.5 **Collected:** 11/26/2012 1:00:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	100	J	60	MDL	510	MRL	mg/Kg	J	Z

Sample ID: SL-676-SA6-SB-3.5-4.5 **Collected:** 11/26/2012 1:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-676-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 1:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	18	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	2000	J	42	MDL	6500	MRL	mg/Kg	J	Z
TIN	1.1	J B	0.93	MDL	11	MRL	mg/Kg	U	B
Zirconium	1.6	J	0.36	MDL	8.8	MRL	mg/Kg	U	F

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-647-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 2:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.020	J	0.015	MDL	9.3	MRL	mg/Kg	J	Z, Q
ARSENIC	6.4	J	0.054	MDL	16	MRL	mg/Kg	J	Z
BARIUM	79	J B	0.075	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.82	J ^	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.036	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	20	J	0.081	MDL	39	MRL	mg/Kg	J	Z
COBALT	5.2	J	0.0071	MDL	22	MRL	mg/Kg	J	Z, Q
COPPER	7.1	J	0.076	MDL	31	MRL	mg/Kg	J	Z
LEAD	6.7	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.43	J	0.019	MDL	5.7	MRL	mg/Kg	J	Z
NICKEL	8.4	J	0.027	MDL	31	MRL	mg/Kg	J	Z, Q, E
SELENIUM	0.14	J	0.14	MDL	0.70	MRL	mg/Kg	J	Z
SILVER	0.029	J	0.022	MDL	0.84	MRL	mg/Kg	UJ	Q, E, F
THALLIUM	0.36	J B	0.0037	MDL	0.49	MRL	mg/Kg	J	Z
VANADIUM	39	J	0.041	MDL	66	MRL	mg/Kg	J	Z, Q
ZINC	54	J	0.34	MDL	120	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-648-SA6-SB-6.5-7.5 *Collected:* 11/26/2012 3:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.013	U	0.013	MDL	7.9	MRL	mg/Kg	UJ	Q
ARSENIC	3.0	J	0.046	MDL	14	MRL	mg/Kg	J	Z
BARIUM	84	J B	0.064	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.61	J ^	0.020	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.066	J	0.0085	MDL	0.91	MRL	mg/Kg	J	Z
CHROMIUM	14	J	0.069	MDL	33	MRL	mg/Kg	J	Z
COBALT	4.0	J	0.0060	MDL	19	MRL	mg/Kg	J	Z, Q
COPPER	4.8	J	0.064	MDL	26	MRL	mg/Kg	J	Z
LEAD	4.1	J	0.016	MDL	31	MRL	mg/Kg	J	Z
MOLYBDENUM	0.34	J	0.016	MDL	4.8	MRL	mg/Kg	J	Z
NICKEL	7.5	J	0.023	MDL	26	MRL	mg/Kg	J	Z, Q, E
SILVER	0.041	J	0.018	MDL	0.72	MRL	mg/Kg	UJ	Q, E, F
THALLIUM	0.24	J B	0.0032	MDL	0.42	MRL	mg/Kg	J	Z
VANADIUM	28	J	0.035	MDL	56	MRL	mg/Kg	J	Z, Q
ZINC	46	J	0.29	MDL	100	MRL	mg/Kg	J	Z

Sample ID: SL-658-SA6-SB-4.0-5.0 *Collected:* 11/26/2012 9:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.019	J	0.012	MDL	7.6	MRL	mg/Kg	J	Z, Q
ARSENIC	4.6	J	0.044	MDL	13	MRL	mg/Kg	J	Z
BERYLLIUM	0.75	J ^	0.020	MDL	0.96	MRL	mg/Kg	J	Z
CADMIUM	0.62	J	0.0082	MDL	0.88	MRL	mg/Kg	J	Z
CHROMIUM	20	J	0.067	MDL	32	MRL	mg/Kg	J	Z
COBALT	10	J	0.0058	MDL	18	MRL	mg/Kg	J	Z, Q
COPPER	11	J	0.062	MDL	25	MRL	mg/Kg	J	Z
LEAD	7.7	J	0.016	MDL	30	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.015	MDL	4.6	MRL	mg/Kg	J	Z
NICKEL	15	J	0.022	MDL	25	MRL	mg/Kg	J	Z, Q, E
SELENIUM	0.16	J	0.12	MDL	0.57	MRL	mg/Kg	J	Z
SILVER	0.46	J	0.018	MDL	0.69	MRL	mg/Kg	J	Z, Q, E
THALLIUM	0.29	J B	0.0031	MDL	0.40	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-658-SA6-SB-4.0-5.0 *Collected:* 11/26/2012 9:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	39	J	0.034	MDL	54	MRL	mg/Kg	J	Z, Q
ZINC	57	J	0.28	MDL	96	MRL	mg/Kg	J	Z

Sample ID: SL-659-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.9	MRL	mg/Kg	UJ	Q
ARSENIC	4.0	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	110	J B	0.072	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.78	J ^	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.21	J	0.0096	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	21	J	0.078	MDL	38	MRL	mg/Kg	J	Z
COBALT	6.3	J	0.0068	MDL	21	MRL	mg/Kg	J	Z, Q
COPPER	9.5	J	0.073	MDL	30	MRL	mg/Kg	J	Z
LEAD	8.0	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.38	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	17	J	0.026	MDL	30	MRL	mg/Kg	J	Z, Q, E
SILVER	0.22	J	0.021	MDL	0.81	MRL	mg/Kg	UJ	Q, E, F
THALLIUM	0.28	J B	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	39	J	0.039	MDL	63	MRL	mg/Kg	J	Z, Q
ZINC	57	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-676-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 1:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.9	MRL	mg/Kg	UJ	Q
ARSENIC	3.5	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	95	J B	0.072	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.72	J ^	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0096	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	18	J	0.078	MDL	38	MRL	mg/Kg	J	Z
COBALT	5.9	J	0.0068	MDL	21	MRL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-676-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 1:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.0	J	0.073	MDL	30	MRL	mg/Kg	J	Z
LEAD	5.4	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.55	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	11	J	0.026	MDL	30	MRL	mg/Kg	J	Z, Q, E
SILVER	0.089	J	0.021	MDL	0.81	MRL	mg/Kg	UJ	Q, E, F
THALLIUM	0.25	J B	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	35	J	0.039	MDL	63	MRL	mg/Kg	J	Z, Q
ZINC	47	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-647-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 2:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.016	J	0.0060	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-658-SA6-SB-4.0-5.0 *Collected:* 11/26/2012 9:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.013	J	0.0066	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: SL-676-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 1:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.010	J	0.0070	MDL	0.025	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-647-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 2:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	1.2	J	0.73	MDL	4.3	MRL	mg/Kg	J	Z

Sample ID: SL-648-SA6-SB-6.5-7.5 *Collected:* 11/26/2012 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	1.5	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z
EFH(C30-C40)	1.8	J	1.1	MDL	11	MRL	mg/Kg	J	Z
EFH(C8-C11)	2.2	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z

Sample ID: SL-659-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	1.0	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z
EFH(C21-C30)	3.1	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z
EFH(C30-C40)	6.6	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-676-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 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
EFH(C21-C30)	1.6	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z
EFH(C30-C40)	2.7	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-647-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 2:15:00 *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-METHYLNAPHTHALENE	0.38	J	0.28	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.50	J B	0.34	MDL	11	MRL	ug/Kg	U	B
NAPHTHALENE	0.58	J B	0.35	MDL	11	MRL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-648-SA6-SB-6.5-7.5 *Collected:* 11/26/2012 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.37	J B	0.35	MDL	11	MRL	ug/Kg	U	B

Sample ID: SL-658-SA6-SB-4.0-5.0 *Collected:* 11/26/2012 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	2.0	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J B	0.32	MDL	10	MRL	ug/Kg	U	B
ANTHRACENE	3.4	J	0.74	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	3.7	J	1.0	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	1.5	J B	0.34	MDL	10	MRL	ug/Kg	U	B
PHENANTHRENE	7.1	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: SL-659-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.34	J	0.26	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.74	J B	0.31	MDL	10	MRL	ug/Kg	U	B
BENZO(G,H,I)PERYLENE	1.4	J	1.1	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	0.68	J B	0.33	MDL	10	MRL	ug/Kg	U	B

Sample ID: SL-676-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 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
1-METHYLNAPHTHALENE	0.30	J	0.27	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.95	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.78	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	1.3	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	1.8	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	2.4	J	1.1	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	0.40	J B	0.34	MDL	11	MRL	ug/Kg	U	B
PHENANTHRENE	1.4	J	1.2	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: VOA
Method: 8015B GRO **Matrix:** AQ

Sample ID: TB-112612 *Collected:* 11/26/2012 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C4-C12)	12	J	10	MDL	25	MRL	ug/L	J	Z

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

Sample ID: SL-658-SA6-SB-4.5 *Collected:* 11/26/2012 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
GASOLINE RANGE ORGANICS (C4-C12)	0.33	J	0.30	MDL	0.94	MRL	mg/Kg	J	Z

Sample ID: SL-659-SA6-SB-4.0 *Collected:* 11/26/2012 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C4-C12)	0.32	J	0.32	MDL	0.98	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36278-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149588/1-A	12/1/2012 3:10:00 AM	TIN	0.938 mg/Kg	SL-647-SA6-SB-3.5-4.5 SL-648-SA6-SB-6.5-7.5 SL-658-SA6-SB-4.0-5.0 SL-659-SA6-SB-3.5-4.5 SL-676-SA6-SB-3.5-4.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-647-SA6-SB-3.5-4.5(RES/TOT)	TIN	1.8 mg/Kg	1.8U mg/Kg
SL-648-SA6-SB-6.5-7.5(RES/TOT)	TIN	1.4 mg/Kg	1.4U mg/Kg
SL-658-SA6-SB-4.0-5.0(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg
SL-659-SA6-SB-3.5-4.5(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg
SL-676-SA6-SB-3.5-4.5(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149587/1-A	12/3/2012 3:50:00 PM	BARIUM THALLIUM	0.0757 mg/Kg 0.00380 mg/Kg	SL-647-SA6-SB-3.5-4.5 SL-648-SA6-SB-6.5-7.5 SL-658-SA6-SB-4.0-5.0 SL-659-SA6-SB-3.5-4.5 SL-676-SA6-SB-3.5-4.5

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149356/1-A	12/3/2012 5:09:00 PM	2-METHYLNAPHTHALENE NAPHTHALENE	0.534 ug/Kg 0.418 ug/Kg	SL-647-SA6-SB-3.5-4.5 SL-648-SA6-SB-6.5-7.5 SL-658-SA6-SB-4.0-5.0 SL-659-SA6-SB-3.5-4.5 SL-676-SA6-SB-3.5-4.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-647-SA6-SB-3.5-4.5(RES)	2-METHYLNAPHTHALENE	0.50 ug/Kg	11U ug/Kg
SL-647-SA6-SB-3.5-4.5(RES)	NAPHTHALENE	0.58 ug/Kg	11U ug/Kg
SL-648-SA6-SB-6.5-7.5(RES)	NAPHTHALENE	0.37 ug/Kg	11U ug/Kg
SL-658-SA6-SB-4.0-5.0(RES)	2-METHYLNAPHTHALENE	1.6 ug/Kg	10U ug/Kg
SL-658-SA6-SB-4.0-5.0(RES)	NAPHTHALENE	1.5 ug/Kg	10U ug/Kg
SL-659-SA6-SB-3.5-4.5(RES)	2-METHYLNAPHTHALENE	0.74 ug/Kg	10U ug/Kg

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-659-SA6-SB-3.5-4.5(RES)	NAPHTHALENE	0.68 ug/Kg	10U ug/Kg
SL-676-SA6-SB-3.5-4.5(RES)	NAPHTHALENE	0.40 ug/Kg	11U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB1-112912(RE2/TOT)	11/29/2012 3:00:00 PM	SODIUM Zirconium	0.19 mg/L 0.0036 mg/L	SL-647-SA6-SB-3.5-4.5 SL-647-SA6-SB-4.0 SL-648-SA6-SB-6.5-7.5 SL-648-SA6-SB-7.0 SL-658-SA6-SB-4.0-5.0 SL-658-SA6-SB-4.5 SL-659-SA6-SB-3.5-4.5 SL-659-SA6-SB-4.0 SL-676-SA6-SB-3.5-4.5 SL-676-SA6-SB-4.0
EB1-112912(RES/TOT)	11/29/2012 3:00:00 PM	IRON MAGNESIUM MANGANESE	0.88 mg/L 0.019 mg/L 0.0023 mg/L	SL-647-SA6-SB-3.5-4.5 SL-647-SA6-SB-4.0 SL-648-SA6-SB-6.5-7.5 SL-648-SA6-SB-7.0 SL-658-SA6-SB-4.0-5.0 SL-658-SA6-SB-4.5 SL-659-SA6-SB-3.5-4.5 SL-659-SA6-SB-4.0 SL-676-SA6-SB-3.5-4.5 SL-676-SA6-SB-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-647-SA6-SB-3.5-4.5(RES/TOT)	Zirconium	0.74 mg/Kg	0.74U mg/Kg
SL-648-SA6-SB-6.5-7.5(RES/TOT)	Zirconium	0.51 mg/Kg	0.51U mg/Kg
SL-658-SA6-SB-4.0-5.0(RES/TOT)	Zirconium	1.8 mg/Kg	1.8U mg/Kg
SL-676-SA6-SB-3.5-4.5(RES/TOT)	Zirconium	1.6 mg/Kg	1.6U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	BORON SODIUM	0.024 mg/L 0.17 mg/L	SL-647-SA6-SB-3.5-4.5 SL-647-SA6-SB-4.0 SL-648-SA6-SB-6.5-7.5 SL-648-SA6-SB-7.0 SL-658-SA6-SB-4.0-5.0 SL-658-SA6-SB-4.5 SL-659-SA6-SB-3.5-4.5 SL-659-SA6-SB-4.0 SL-676-SA6-SB-3.5-4.5 SL-676-SA6-SB-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-658-SA6-SB-4.0-5.0(RES/TOT)	BORON	2.4 mg/Kg	2.4U mg/Kg
SL-659-SA6-SB-3.5-4.5(RES/TOT)	BORON	1.6 mg/Kg	1.6U mg/Kg

Method: 6020A
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	SILVER	0.00078 mg/L	SL-647-SA6-SB-3.5-4.5 SL-647-SA6-SB-4.0 SL-648-SA6-SB-6.5-7.5 SL-648-SA6-SB-7.0 SL-658-SA6-SB-4.0-5.0 SL-658-SA6-SB-4.5 SL-659-SA6-SB-3.5-4.5 SL-659-SA6-SB-4.0 SL-676-SA6-SB-3.5-4.5 SL-676-SA6-SB-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-647-SA6-SB-3.5-4.5(RES/TOT)	SILVER	0.029 mg/Kg	0.029U mg/Kg
SL-648-SA6-SB-6.5-7.5(RES/TOT)	SILVER	0.041 mg/Kg	0.041U mg/Kg
SL-659-SA6-SB-3.5-4.5(RES/TOT)	SILVER	0.22 mg/Kg	0.22U mg/Kg
SL-676-SA6-SB-3.5-4.5(RES/TOT)	SILVER	0.089 mg/Kg	0.089U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-658-SA6-SB-4.0-5.0MS (TOT) SL-658-SA6-SB-4.0-5.0MSD (TOT) (SL-647-SA6-SB-3.5-4.5 SL -648-SA6-SB-6.5-7.5 SL -658-SA6-SB-4.0-5.0 SL -659-SA6-SB-3.5-4.5 SL -676-SA6-SB-3.5-4.5)	ANTIMONY BARIUM	5 25	4 33	75.00-125.00 75.00-125.00	- -	ANTIMONY BARIUM	J (all detects) UJ (all non-detects) Ba, No Qual, >4x Post Spike = 100%
SL-658-SA6-SB-4.0-5.0MS (TOT) SL-658-SA6-SB-4.0-5.0MSD (TOT) (SL-647-SA6-SB-3.5-4.5 SL -648-SA6-SB-6.5-7.5 SL -658-SA6-SB-4.0-5.0 SL -659-SA6-SB-3.5-4.5 SL -676-SA6-SB-3.5-4.5)	COBALT NICKEL SILVER VANADIUM	72 1005 191 63	73 - - 65	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- 145 (20.00) 70 (20.00) -	COBALT NICKEL SILVER VANADIUM	J(all detects) UJ(all non-detects)

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-658-SA6-SB-4.0-5.0MS (TOT) SL-658-SA6-SB-4.0-5.0MSD (TOT) (SL-647-SA6-SB-3.5-4.5 SL -648-SA6-SB-6.5-7.5 SL -658-SA6-SB-4.0-5.0 SL -659-SA6-SB-3.5-4.5 SL -676-SA6-SB-3.5-4.5)	ALUMINUM TITANIUM	2232 234	1567 132	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	No Qual, >4x
SL-658-SA6-SB-4.0-5.0MS (TOT) SL-658-SA6-SB-4.0-5.0MSD (TOT) (SL-647-SA6-SB-3.5-4.5 SL -648-SA6-SB-6.5-7.5 SL -658-SA6-SB-4.0-5.0 SL -659-SA6-SB-3.5-4.5 SL -676-SA6-SB-3.5-4.5)	IRON	1396	-600	75.00-125.00	-	IRON	No Qual, >4x
SL-658-SA6-SB-4.0-5.0MSD (TOT) (SL-647-SA6-SB-3.5-4.5 SL -648-SA6-SB-6.5-7.5 SL -658-SA6-SB-4.0-5.0 SL -659-SA6-SB-3.5-4.5 SL -676-SA6-SB-3.5-4.5)	MANGANESE	-	47	75.00-125.00	-	MANGANESE	No Qual, >4x

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B GRO
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
TB-112612	GASOLINE RANGE ORGANICS (C4-C12)	J	12	25	MRL	ug/L	J (all detects)

Method: 6010C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-647-SA6-SB-3.5-4.5	ALUMINUM	J	16000	19000	MRL	mg/Kg	
	LITHIUM	J	26	34	MRL	mg/Kg	
	MANGANESE	J	190	460	MRL	mg/Kg	
	POTASSIUM	J	2000	6000	MRL	mg/Kg	J (all detects)
	SODIUM	J	160	470	MRL	mg/Kg	
	TIN	J B	1.8	10	MRL	mg/Kg	
	Zirconium	J	0.74	8.0	MRL	mg/Kg	
SL-648-SA6-SB-6.5-7.5	ALUMINUM	J	13000	22000	MRL	mg/Kg	
	LITHIUM	J	22	40	MRL	mg/Kg	
	MANGANESE	J	280	530	MRL	mg/Kg	
	POTASSIUM	J	3100	6900	MRL	mg/Kg	J (all detects)
	SODIUM	J	130	540	MRL	mg/Kg	
	TIN	J B	1.4	12	MRL	mg/Kg	
	Zirconium	J	0.51	9.3	MRL	mg/Kg	
SL-658-SA6-SB-4.0-5.0	ALUMINUM	J	12000	21000	MRL	mg/Kg	
	BORON	J	2.4	10	MRL	mg/Kg	
	LITHIUM	J	18	38	MRL	mg/Kg	
	MANGANESE	J	290	510	MRL	mg/Kg	
	POTASSIUM	J	3600	6600	MRL	mg/Kg	J (all detects)
	SODIUM	J	120	520	MRL	mg/Kg	
	TIN	J B	1.1	11	MRL	mg/Kg	
	Zirconium	J	1.8	8.9	MRL	mg/Kg	
SL-659-SA6-SB-3.5-4.5	ALUMINUM	J	14000	18000	MRL	mg/Kg	
	BORON	J	1.6	8.5	MRL	mg/Kg	
	LITHIUM	J	21	32	MRL	mg/Kg	
	MANGANESE	J	270	430	MRL	mg/Kg	
	POTASSIUM	J	2800	5600	MRL	mg/Kg	J (all detects)
	SODIUM	J	100	440	MRL	mg/Kg	
	TIN	J B	1.1	9.6	MRL	mg/Kg	
	Zirconium	J	1.9	7.5	MRL	mg/Kg	
SL-676-SA6-SB-3.5-4.5	ALUMINUM	J	13000	20000	MRL	mg/Kg	
	LITHIUM	J	18	38	MRL	mg/Kg	
	MANGANESE	J	240	510	MRL	mg/Kg	
	POTASSIUM	J	2000	6500	MRL	mg/Kg	J (all detects)
	SODIUM	J	100	510	MRL	mg/Kg	
	TIN	J B	1.1	11	MRL	mg/Kg	
	Zirconium	J	1.6	8.8	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-647-SA6-SB-3.5-4.5	ANTIMONY	J	0.020	9.3	MRL	mg/Kg	
	ARSENIC	J	6.4	16	MRL	mg/Kg	
	BARIUM	J B	79	150	MRL	mg/Kg	
	BERYLLIUM	J ^	0.82	1.2	MRL	mg/Kg	
	CADMIUM	J	0.036	1.1	MRL	mg/Kg	
	CHROMIUM	J	20	39	MRL	mg/Kg	
	COBALT	J	5.2	22	MRL	mg/Kg	
	COPPER	J	7.1	31	MRL	mg/Kg	
	LEAD	J	6.7	36	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.43	5.7	MRL	mg/Kg	
	NICKEL	J	8.4	31	MRL	mg/Kg	
	SELENIUM	J	0.14	0.70	MRL	mg/Kg	
	SILVER	J	0.029	0.84	MRL	mg/Kg	
	THALLIUM	J B	0.36	0.49	MRL	mg/Kg	
	VANADIUM	J	39	66	MRL	mg/Kg	
	ZINC	J	54	120	MRL	mg/Kg	
SL-648-SA6-SB-6.5-7.5	ARSENIC	J	3.0	14	MRL	mg/Kg	
	BARIUM	J B	84	130	MRL	mg/Kg	
	BERYLLIUM	J ^	0.61	1.0	MRL	mg/Kg	
	CADMIUM	J	0.066	0.91	MRL	mg/Kg	
	CHROMIUM	J	14	33	MRL	mg/Kg	
	COBALT	J	4.0	19	MRL	mg/Kg	
	COPPER	J	4.8	26	MRL	mg/Kg	
	LEAD	J	4.1	31	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.34	4.8	MRL	mg/Kg	
	NICKEL	J	7.5	26	MRL	mg/Kg	
	SILVER	J	0.041	0.72	MRL	mg/Kg	
	THALLIUM	J B	0.24	0.42	MRL	mg/Kg	
	VANADIUM	J	28	56	MRL	mg/Kg	
	ZINC	J	46	100	MRL	mg/Kg	
SL-658-SA6-SB-4.0-5.0	ANTIMONY	J	0.019	7.6	MRL	mg/Kg	
	ARSENIC	J	4.6	13	MRL	mg/Kg	
	BERYLLIUM	J ^	0.75	0.96	MRL	mg/Kg	
	CADMIUM	J	0.62	0.88	MRL	mg/Kg	
	CHROMIUM	J	20	32	MRL	mg/Kg	
	COBALT	J	10	18	MRL	mg/Kg	
	COPPER	J	11	25	MRL	mg/Kg	
	LEAD	J	7.7	30	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.42	4.6	MRL	mg/Kg	
	NICKEL	J	15	25	MRL	mg/Kg	
	SELENIUM	J	0.16	0.57	MRL	mg/Kg	
	SILVER	J	0.46	0.69	MRL	mg/Kg	
	THALLIUM	J B	0.29	0.40	MRL	mg/Kg	
	VANADIUM	J	39	54	MRL	mg/Kg	
	ZINC	J	57	96	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-659-SA6-SB-3.5-4.5	ARSENIC	J	4.0	15	MRL	mg/Kg	
	BARIUM	J B	110	140	MRL	mg/Kg	
	BERYLLIUM	J ^	0.78	1.1	MRL	mg/Kg	
	CADMIUM	J	0.21	1.0	MRL	mg/Kg	
	CHROMIUM	J	21	38	MRL	mg/Kg	
	COBALT	J	6.3	21	MRL	mg/Kg	
	COPPER	J	9.5	30	MRL	mg/Kg	
	LEAD	J	8.0	35	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.38	5.4	MRL	mg/Kg	
	NICKEL	J	17	30	MRL	mg/Kg	
	SILVER	J	0.22	0.81	MRL	mg/Kg	
	THALLIUM	J B	0.28	0.47	MRL	mg/Kg	
	VANADIUM	J	39	63	MRL	mg/Kg	
	ZINC	J	57	110	MRL	mg/Kg	
SL-676-SA6-SB-3.5-4.5	ARSENIC	J	3.5	15	MRL	mg/Kg	
	BARIUM	J B	95	140	MRL	mg/Kg	
	BERYLLIUM	J ^	0.72	1.1	MRL	mg/Kg	
	CADMIUM	J	0.13	1.0	MRL	mg/Kg	
	CHROMIUM	J	18	38	MRL	mg/Kg	
	COBALT	J	5.9	21	MRL	mg/Kg	
	COPPER	J	8.0	30	MRL	mg/Kg	
	LEAD	J	5.4	35	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.55	5.4	MRL	mg/Kg	
	NICKEL	J	11	30	MRL	mg/Kg	
	SILVER	J	0.089	0.81	MRL	mg/Kg	
	THALLIUM	J B	0.25	0.47	MRL	mg/Kg	
	VANADIUM	J	35	63	MRL	mg/Kg	
	ZINC	J	47	110	MRL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-647-SA6-SB-3.5-4.5	MERCURY	J	0.016	0.022	MRL	mg/Kg	J (all detects)
SL-658-SA6-SB-4.0-5.0	MERCURY	J	0.013	0.024	MRL	mg/Kg	J (all detects)
SL-676-SA6-SB-3.5-4.5	MERCURY	J	0.010	0.025	MRL	mg/Kg	J (all detects)

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-647-SA6-SB-3.5-4.5	TOTAL EFH(C8-C40)	J	1.2	4.3	MRL	mg/Kg	J (all detects)
SL-648-SA6-SB-6.5-7.5	EFH(C21-C30)	J	1.5	5.4	MRL	mg/Kg	
	EFH(C30-C40)	J	1.8	11	MRL	mg/Kg	J (all detects)
	EFH(C8-C11)	J	2.2	5.4	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36278-1 **Laboratory: TA DEN**

EDD Filename: 280-36278-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-659-SA6-SB-3.5-4.5	EFH(C15-C20)	J	1.0	5.2	MRL	mg/Kg	J (all detects)
	EFH(C21-C30)	J	3.1	5.2	MRL	mg/Kg	
	EFH(C30-C40)	J	6.6	10	MRL	mg/Kg	
SL-676-SA6-SB-3.5-4.5	EFH(C21-C30)	J	1.6	5.2	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	2.7	10	MRL	mg/Kg	

Method: 8015B GRO

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-658-SA6-SB-4.5	GASOLINE RANGE ORGANICS (C4-C12)	J	0.33	0.94	MRL	mg/Kg	J (all detects)
SL-659-SA6-SB-4.0	GASOLINE RANGE ORGANICS (C4-C12)	J	0.32	0.98	MRL	mg/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-647-SA6-SB-3.5-4.5	1-METHYLNAPHTHALENE	J	0.38	11	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J B	0.50	11	MRL	ug/Kg	
	NAPHTHALENE	J B	0.58	11	MRL	ug/Kg	
SL-648-SA6-SB-6.5-7.5	NAPHTHALENE	J B	0.37	11	MRL	ug/Kg	J (all detects)
SL-658-SA6-SB-4.0-5.0	1-METHYLNAPHTHALENE	J	2.0	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J B	1.6	10	MRL	ug/Kg	
	ANTHRACENE	J	3.4	10	MRL	ug/Kg	
	FLUORANTHENE	J	3.7	10	MRL	ug/Kg	
	NAPHTHALENE	J B	1.5	10	MRL	ug/Kg	
	PHENANTHRENE	J	7.1	10	MRL	ug/Kg	
SL-659-SA6-SB-3.5-4.5	1-METHYLNAPHTHALENE	J	0.34	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J B	0.74	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	10	MRL	ug/Kg	
	NAPHTHALENE	J B	0.68	10	MRL	ug/Kg	
SL-676-SA6-SB-3.5-4.5	1-METHYLNAPHTHALENE	J	0.30	11	MRL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.4	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.5	11	MRL	ug/Kg	
	CHRYSENE	J	1.8	11	MRL	ug/Kg	
	FLUORANTHENE	J	2.4	11	MRL	ug/Kg	
	NAPHTHALENE	J B	0.40	11	MRL	ug/Kg	
	PHENANTHRENE	J	1.4	11	MRL	ug/Kg	

LDC #: 29419V4
SDG #: 280-36278-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/2/13
Page: 1 of 1
Reviewer: AL
2nd Reviewer: W

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/26/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (Al, Fe, Mn, Ti, Ba 7/4x; Sb %R= 100% G (UJ)
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	NA	
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	SW	EB= EB1-112912, ~~EB2-112912~~ SM FB= FB-111412 (280-35930-1) ~~(280-35928-1)~~

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

Validated Samples:

1	SL-658-SA6-SB-4.0-5.0	11		21		31	
2	SL-659-SA6-SB-3.5-4.5	12		22		32	
3	SL-647-SA6-SB-3.5-4.5	13		23		33	
4	SL-676-SA6-SB-3.5-4.5	14		24		34	
5	SL-648-SA6-SB-6.5-7.5	15		25		35	
6	SL-658-SA6-SB-4.0-5.0MS	16		26		36	
7	SL-658-SA6-SB-4.0-5.0MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

LDC #: 29419V4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

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

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1								
Na			278	139	120								
Tl			0.0590	0.0295									

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2-5

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	No Qualifiers								
Na			123	61.5									
Tl			0.0530	0.0265									

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 #: 29419V4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: AL
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/29/12 Soil factor applied 100x; Hg=83x
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All

Analyte	Blank ID	Blank ID		Sample Identification									
	EB1-112912 (SDG: 280-36428-1)	~~EB2-112912 (SDG: 280-36428-1)~~	Action Limit	~~2~~ 3	~~3~~ 4	~~4~~ 5	1						
Ca		~~0.037~~	~~165~~ 5										
Fe	0.88	~~0.67~~	440										
Mg	0.019		9.5										
Mn	0.0023	~~0.0016~~	1.15										
Na	0.19	~~0.10~~	95										
Zr	0.0036		1.8	0.74	1.6	0.51	1.8						

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 #: 29419V4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: gm
2nd Reviewer: lw

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/14/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-111412 (SDG:280-35930-1)	Action Limit	1	2	3	4	5						
B	0.024	12	2.4	1.6									
Na	0.17	85											
Ag	0.00078	0.39		0.22	0.029	0.089	0.041						

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-36278-2

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-Nov-2012	SL-658-SA6-SB-4.0-5.0	280-36278-3	N	1613	1613B	III
26-Nov-2012	SL-659-SA6-SB-3.5-4.5	280-36278-6	N	1613	1613B	III
26-Nov-2012	SL-676-SA6-SB-3.5-4.5	280-36278-12	N	1613	1613B	III
26-Nov-2012	SL-647-SA6-SB-3.5-4.5	280-36278-9	N	1613	1613B	III
26-Nov-2012	SL-648-SA6-SB-6.5-7.5	280-36278-15	N	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-2 **Laboratory: TA DEN**

EDD Filename: 280-36278-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-647-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 2:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.19	J	0.093	MDL	5.4	MRL	ng/kg	J	Z
OCDD	2.0	B J	0.12	MDL	11	MRL	ng/kg	J	Z
OCDF	0.18	Q J	0.092	MDL	11	MRL	ng/kg	J	Z

Sample ID: SL-648-SA6-SB-6.5-7.5 *Collected:* 11/26/2012 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.8	J	0.075	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.17	Q J	0.054	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.088	Q J	0.054	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.077	J	0.059	MDL	5.4	MRL	ng/kg	J	Z
OCDF	0.38	J	0.066	MDL	11	MRL	ng/kg	J	Z

Sample ID: SL-658-SA6-SB-4.0-5.0 *Collected:* 11/26/2012 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.3	J	0.084	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	1.1	J	0.13	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.16	Q J	0.098	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.9	C J	0.069	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.60	Q J	0.099	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.66	Q J	0.074	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.68	C J	0.092	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.34	J	0.090	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.044	Q J	0.15	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.52	J	0.096	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.23	Q J	0.084	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	1.1	J	0.088	MDL	5.2	MRL	ng/kg	J	Z
OCDF	9.7	J	0.079	MDL	10	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-2 **Laboratory: TA DEN**

EDD Filename: 280-36278-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-659-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.6	J	0.070	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.33	J	0.10	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.21	J	0.072	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.37	Q J	0.048	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.58	Q J	0.080	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.28	J	0.048	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.65	J	0.071	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.19	Q J	0.11	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.16	J	0.080	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.11	Q J	0.048	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.22	J	0.071	MDL	5.2	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.41	J	0.10	MDL	1.0	MRL	ng/kg	J	Z
OCDF	3.7	S J	0.097	MDL	10	MRL	ng/kg	J	Z

Sample ID: SL-676-SA6-SB-3.5-4.5 *Collected:* 11/26/2012 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.6	J	0.073	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.94	J	0.046	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.16	Q J	0.033	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.18	J	0.056	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.078	Q J	0.033	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.11	Q J	0.051	MDL	5.1	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.11	J	0.032	MDL	5.1	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.077	Q J	0.052	MDL	5.1	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.072	Q J	0.081	MDL	1.0	MRL	ng/kg	J	Z
OCDF	1.3	J	0.048	MDL	10	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36278-2 **Laboratory: TA DEN**

EDD Filename: 280-36278-2 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36278-2/
H2K290403

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36278-2 **Laboratory: TA DEN**

EDD Filename: 280-36278-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-647-SA6-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	J	0.19	5.4	MRL	ng/kg	
	OCDD	B J	2.0	11	MRL	ng/kg	J (all detects)
	OCDF	Q J	0.18	11	MRL	ng/kg	
SL-648-SA6-SB-6.5-7.5	1,2,3,4,6,7,8-HPCDD	J	3.8	5.4	MRL	ng/kg	
	1,2,3,4,6,7,8-HPCDF	Q J	0.17	5.4	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.088	5.4	MRL	ng/kg	J (all detects)
	1,2,3,6,7,8-HXCDD	J	0.077	5.4	MRL	ng/kg	
	OCDF	J	0.38	11	MRL	ng/kg	
SL-658-SA6-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	J	4.3	5.2	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	J	1.1	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.16	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	C J	1.9	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	Q J	0.60	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.66	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	0.68	5.2	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDF	J	0.34	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.044	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.52	5.2	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.23	5.2	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	1.1	5.2	MRL	ng/kg	
	OCDF	J	9.7	10	MRL	ng/kg	
SL-659-SA6-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDF	J	2.6	5.2	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	J	0.33	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.21	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.37	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	Q J	0.58	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	0.28	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.65	5.2	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	0.19	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.16	5.2	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.11	5.2	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.22	5.2	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.41	1.0	MRL	ng/kg	
	OCDF	S J	3.7	10	MRL	ng/kg	
SL-676-SA6-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	J	4.6	5.1	MRL	ng/kg	
	1,2,3,4,6,7,8-HPCDF	J	0.94	5.1	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.16	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.18	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.078	5.1	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDD	Q J	0.11	5.1	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	0.11	5.1	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.077	5.1	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.072	1.0	MRL	ng/kg	
	OCDF	J	1.3	10	MRL	ng/kg	

SAMPLE DELIVERY GROUP

280-36311-1

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-Nov-2012	TB-112712	280-36311-1	TB	METHOD	8015B GRO	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5	280-36311-2	N	3546	8270C SIM	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5	280-36311-2	N	3550C	8015B EFH	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5	280-36311-3	N	3050B	6010C	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5	280-36311-3	N	3050B	6020A	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5	280-36311-3	N	3546	8082A	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5	280-36311-3	N	7471B	7471B	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5MS	280-36311-3MS	MS	3050B	6010C	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5MS	280-36311-3MS	MS	3050B	6020A	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5MSD	280-36311-3MSD	MSD	3050B	6010C	III
27-Nov-2012	SL-662-SA6-SB-3.5-4.5MSD	280-36311-3MSD	MSD	3050B	6020A	III
27-Nov-2012	SL-662-SA6-SB-4.0	280-36311-4	N	5035	8015B GRO	III
27-Nov-2012	SL-661-SA6-SB-2.5-3.5	280-36311-6	N	3546	8270C SIM	III
27-Nov-2012	SL-661-SA6-SB-2.5-3.5	280-36311-6	N	3550C	8015B EFH	III
27-Nov-2012	SL-661-SA6-SB-2.5-3.5	280-36311-7	N	3050B	6010C	III
27-Nov-2012	SL-661-SA6-SB-2.5-3.5	280-36311-7	N	3050B	6020A	III
27-Nov-2012	SL-661-SA6-SB-2.5-3.5	280-36311-7	N	3546	8082A	III
27-Nov-2012	SL-661-SA6-SB-2.5-3.5	280-36311-7	N	7471B	7471B	III
27-Nov-2012	SL-661-SA6-SB-3.0	280-36311-5	N	5035	8015B GRO	III
27-Nov-2012	SL-677A-SA6-SB-0.0-0.5	280-36311-8	N	3546	8082A	III
27-Nov-2012	SL-677B-SA6-SB-0.0-0.5	280-36311-9	N	3546	8082A	III
27-Nov-2012	SL-677C-SA6-SB-0.0-0.5	280-36311-10	N	3546	8082A	III
27-Nov-2012	SL-651-SA6-SB-0.0-0.5	280-36311-14	N	3546	8270C SIM	III
27-Nov-2012	SL-651-SA6-SB-0.0-0.5	280-36311-14	N	3550C	8015B EFH	III
27-Nov-2012	SL-651-SA6-SB-0.0-0.5	280-36311-15	N	3050B	6010C	III
27-Nov-2012	SL-651-SA6-SB-0.0-0.5	280-36311-15	N	3050B	6020A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-Nov-2012	SL-651-SA6-SB-0.0-0.5	280-36311-15	N	3546	8082A	III
27-Nov-2012	SL-651-SA6-SB-0.0-0.5	280-36311-15	N	7471B	7471B	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-11	N	3546	8270C SIM	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-11	N	3550C	8015B EFH	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-12	N	3050B	6010C	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-12	N	3050B	6020A	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-12	N	3546	8081B	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-12	N	3546	8082A	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-12	N	7471B	7471B	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-12	N	8151A	8151A	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0MS	280-36311-12MS	MS	3546	8081B	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0MSD	280-36311-12MSD	MSD	3546	8081B	III
27-Nov-2012	SL-650-SA6-SB-2.5	280-36311-13	N	5035	8015B GRO	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-16	N	3546	8270C SIM	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-16	N	3550C	8015B EFH	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-17	N	3050B	6010C	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-17	N	3050B	6020A	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-17	N	3546	8081B	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-17	N	3546	8082A	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-17	N	7471B	7471B	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-17	N	8151A	8151A	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-18	N	3546	8270C SIM	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-18	N	3550C	8015B EFH	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5MS	280-36311-18MS	MS	3546	8270C SIM	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5MSD	280-36311-18MSD	MSD	3546	8270C SIM	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-19	N	3050B	6010C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-19	N	3050B	6020A	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-19	N	3546	8081B	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-19	N	3546	8082A	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-19	N	7471B	7471B	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-19	N	8151A	8151A	III
27-Nov-2012	SL-652-SA6-SB-4.0	280-36311-20	N	5035	8015B GRO	III

III = EPA Level 3 Data Review *N = 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: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-650-SA6-SB-2.0-3.0 *Collected:* 11/27/2012 2:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.98	J	0.95	MDL	9.4	MRL	mg/Kg	U	F
LITHIUM	17	J ^	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	180	J	0.097	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	2100	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	93	J	57	MDL	480	MRL	mg/Kg	U	F
TIN	2.1	J B	0.88	MDL	11	MRL	mg/Kg	U	B
Zirconium	1.6	J	0.34	MDL	8.3	MRL	mg/Kg	U	F

Sample ID: SL-651-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 1:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	2.4	J	0.95	MDL	9.4	MRL	mg/Kg	U	F
LITHIUM	17	J ^	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	230	J	0.097	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	3000	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	91	J	57	MDL	490	MRL	mg/Kg	U	F
TIN	1.7	J B	0.89	MDL	11	MRL	mg/Kg	U	B
Zirconium	1.8	J	0.34	MDL	8.4	MRL	mg/Kg	U	F

Sample ID: SL-652-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 2:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	2.5	J	0.89	MDL	8.8	MRL	mg/Kg	U	F
LITHIUM	18	J ^	0.27	MDL	33	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.090	MDL	450	MRL	mg/Kg	J	Z
POTASSIUM	3100	J	37	MDL	5800	MRL	mg/Kg	J	Z
SODIUM	76	J	53	MDL	450	MRL	mg/Kg	U	F, F
TIN	1.7	J B	0.83	MDL	9.9	MRL	mg/Kg	U	B
Zirconium	1.6	J	0.32	MDL	7.8	MRL	mg/Kg	U	F

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-652-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 3:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	1.7	J	0.92	MDL	9.1	MRL	mg/Kg	U	F
LITHIUM	22	J ^	0.28	MDL	35	MRL	mg/Kg	J	Z
MANGANESE	280	J	0.094	MDL	460	MRL	mg/Kg	J	Z
POTASSIUM	2600	J	38	MDL	6000	MRL	mg/Kg	J	Z
SODIUM	100	J	55	MDL	470	MRL	mg/Kg	J	Z
TIN	1.8	J B	0.86	MDL	10	MRL	mg/Kg	U	B
Zirconium	2.0	J	0.33	MDL	8.1	MRL	mg/Kg	J	Z

Sample ID: SL-661-SA6-SB-2.5-3.5 *Collected:* 11/27/2012 9:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	1.0	J	0.87	MDL	8.6	MRL	mg/Kg	U	F
LITHIUM	18	J ^	0.27	MDL	33	MRL	mg/Kg	J	Z
MANGANESE	230	J	0.089	MDL	440	MRL	mg/Kg	J	Z
POTASSIUM	2100	J	36	MDL	5700	MRL	mg/Kg	J	Z
SODIUM	100	J	52	MDL	440	MRL	mg/Kg	J	Z
TIN	1.7	J B	0.81	MDL	9.7	MRL	mg/Kg	U	B
Zirconium	2.1	J	0.31	MDL	7.6	MRL	mg/Kg	J	Z

Sample ID: SL-662-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 8:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.4	MDL	19000	MRL	mg/Kg	J	Z
BORON	1.1	J	0.92	MDL	9.1	MRL	mg/Kg	U	F
LITHIUM	19	J	0.28	MDL	35	MRL	mg/Kg	J	Z
MANGANESE	170	J	0.094	MDL	460	MRL	mg/Kg	J	Z
POTASSIUM	1600	J	38	MDL	6000	MRL	mg/Kg	J	Z
SODIUM	110	J	55	MDL	470	MRL	mg/Kg	J	Z
TIN	1.8	J B	0.85	MDL	10	MRL	mg/Kg	U	B
Zirconium	1.9	J	0.33	MDL	8.0	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-650-SA6-SB-2.0-3.0 *Collected:* 11/27/2012 2:15:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.88	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z

Sample ID: SL-650-SA6-SB-2.0-3.0 *Collected:* 11/27/2012 2:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.6	MRL	mg/Kg	UJ	Q
ARSENIC	6.3	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	85	J	0.069	MDL	140	MRL	mg/Kg	J	Z
CADMIUM	0.042	J	0.0092	MDL	0.98	MRL	mg/Kg	J	Z
CHROMIUM	19	J	0.075	MDL	36	MRL	mg/Kg	J	Z
COBALT	4.8	J	0.0065	MDL	21	MRL	mg/Kg	J	Z, Q, E
COPPER	6.6	J	0.070	MDL	29	MRL	mg/Kg	J	Z
LEAD	6.0	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.26	J	0.017	MDL	5.2	MRL	mg/Kg	J	Z
NICKEL	9.9	J	0.025	MDL	29	MRL	mg/Kg	J	Z
SELENIUM	0.17	J	0.13	MDL	0.64	MRL	mg/Kg	J	Z
SILVER	0.039	J	0.020	MDL	0.78	MRL	mg/Kg	U	F
THALLIUM	0.24	J B	0.0035	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	37	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	43	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-651-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 1:00:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.51	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z

Sample ID: SL-651-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 1:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.016	J	0.015	MDL	9.2	MRL	mg/Kg	J	Z, Q
ARSENIC	4.2	J	0.053	MDL	16	MRL	mg/Kg	J	Z
BARIUM	90	J	0.074	MDL	150	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-651-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 1:00:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.29	J	0.0099	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.080	MDL	39	MRL	mg/Kg	J	Z
COBALT	4.7	J	0.0070	MDL	22	MRL	mg/Kg	J	Z, Q, E
COPPER	8.8	J	0.075	MDL	31	MRL	mg/Kg	J	Z
LEAD	28	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.40	J	0.019	MDL	5.6	MRL	mg/Kg	J	Z
NICKEL	10	J	0.027	MDL	31	MRL	mg/Kg	J	Z
SILVER	0.27	J	0.021	MDL	0.83	MRL	mg/Kg	U	F
THALLIUM	0.21	J B	0.0037	MDL	0.49	MRL	mg/Kg	J	Z
VANADIUM	28	J	0.041	MDL	65	MRL	mg/Kg	J	Z
ZINC	74	J	0.33	MDL	120	MRL	mg/Kg	J	Z

Sample ID: SL-652-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 2:55:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.48	J	0.021	MDL	1.1	MRL	mg/Kg	J	Z

Sample ID: SL-652-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 2:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.053	J	0.013	MDL	8.3	MRL	mg/Kg	J	Z, Q
ARSENIC	3.6	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	80	J	0.067	MDL	130	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.073	MDL	35	MRL	mg/Kg	J	Z
COBALT	4.5	J	0.0063	MDL	20	MRL	mg/Kg	J	Z, Q, E
COPPER	10	J	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	17	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.37	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	11	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.43	J	0.019	MDL	0.75	MRL	mg/Kg	J	Z
THALLIUM	0.20	J B	0.0034	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	27	J	0.037	MDL	59	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-652-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 3:10:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.79	J	0.020	MDL	0.98	MRL	mg/Kg	J	Z

Sample ID: SL-652-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 3:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.013	J	0.012	MDL	7.7	MRL	mg/Kg	J	Z, Q
ARSENIC	4.5	J	0.045	MDL	13	MRL	mg/Kg	J	Z
BARIUM	97	J	0.063	MDL	120	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0083	MDL	0.89	MRL	mg/Kg	J	Z
CHROMIUM	19	J	0.068	MDL	33	MRL	mg/Kg	J	Z
COBALT	5.5	J	0.0059	MDL	19	MRL	mg/Kg	J	Z, Q, E
COPPER	7.8	J	0.063	MDL	26	MRL	mg/Kg	J	Z
LEAD	6.2	J	0.016	MDL	30	MRL	mg/Kg	J	Z
MOLYBDENUM	0.33	J	0.016	MDL	4.7	MRL	mg/Kg	J	Z
NICKEL	12	J	0.023	MDL	26	MRL	mg/Kg	J	Z
SILVER	0.079	J	0.018	MDL	0.70	MRL	mg/Kg	U	F
THALLIUM	0.25	J B	0.0031	MDL	0.41	MRL	mg/Kg	J	Z
VANADIUM	36	J	0.034	MDL	55	MRL	mg/Kg	J	Z
ZINC	48	J	0.28	MDL	98	MRL	mg/Kg	J	Z

Sample ID: SL-661-SA6-SB-2.5-3.5 *Collected:* 11/27/2012 9:40:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.64	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z

Sample ID: SL-661-SA6-SB-2.5-3.5 *Collected:* 11/27/2012 9:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.1	J	0.014	MDL	8.5	MRL	mg/Kg	J	Z, Q
ARSENIC	3.4	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	85	J	0.069	MDL	140	MRL	mg/Kg	J	Z
CADMIUM	0.098	J	0.0092	MDL	0.98	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-661-SA6-SB-2.5-3.5 *Collected:* 11/27/2012 9:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	16	J	0.075	MDL	36	MRL	mg/Kg	J	Z
COBALT	5.2	J	0.0065	MDL	21	MRL	mg/Kg	J	Z, Q, E
COPPER	6.1	J	0.070	MDL	28	MRL	mg/Kg	J	Z
LEAD	9.6	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.37	J	0.017	MDL	5.2	MRL	mg/Kg	J	Z
NICKEL	9.4	J	0.025	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.076	J	0.020	MDL	0.77	MRL	mg/Kg	U	F
THALLIUM	0.23	J B	0.0034	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	32	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	39	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-662-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 8:55:00 *Analysis Type:* RE2/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.75	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z

Sample ID: SL-662-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 8:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.022	J	0.015	MDL	9.0	MRL	mg/Kg	J	Z, Q
ARSENIC	4.2	J	0.052	MDL	16	MRL	mg/Kg	J	Z
BARIUM	84	J	0.073	MDL	150	MRL	mg/Kg	J	Z
CADMIUM	0.057	J	0.0097	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	18	J	0.079	MDL	38	MRL	mg/Kg	J	Z
COBALT	5.0	J	0.0069	MDL	22	MRL	mg/Kg	J	Z, Q, E
COPPER	5.9	J	0.074	MDL	30	MRL	mg/Kg	J	Z
LEAD	5.0	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.34	J	0.018	MDL	5.5	MRL	mg/Kg	J	Z
NICKEL	9.0	J	0.026	MDL	30	MRL	mg/Kg	J	Z
SELENIUM	0.15	J	0.14	MDL	0.68	MRL	mg/Kg	J	Z
SILVER	0.048	J	0.021	MDL	0.82	MRL	mg/Kg	U	F
THALLIUM	0.24	J B	0.0036	MDL	0.48	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Sample ID: SL-662-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 8:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	38	J	0.040	MDL	64	MRL	mg/Kg	J	Z
ZINC	40	J	0.33	MDL	110	MRL	mg/Kg	J	Z

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

Sample ID: SL-650-SA6-SB-2.0-3.0 *Collected:* 11/27/2012 2:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.016	J	0.0068	MDL	0.025	MRL	mg/Kg	J	Z

Sample ID: SL-652-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 2:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.017	J	0.0062	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-652-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 3:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0081	J	0.0060	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-661-SA6-SB-2.5-3.5 *Collected:* 11/27/2012 9:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0088	J	0.0067	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: SL-662-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 8:55:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.013	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-650-SA6-SB-2.0-3.0 *Collected:* 11/27/2012 2:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	1.3	J B	0.70	MDL	4.1	MRL	mg/Kg	U	B

Sample ID: SL-652-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 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
EFH(C30-C40)	3.2	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-661-SA6-SB-2.5-3.5 *Collected:* 11/27/2012 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
TOTAL EFH(C8-C40)	0.90	J B	0.70	MDL	4.1	MRL	mg/Kg	U	B

Method Category: SVOA

Method: 8082A **Matrix: SO**

Sample ID: SL-677A-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 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
AROCLOR 1254	15	J	5.9	MDL	18	MRL	ug/Kg	J	Z
AROCLOR 1260	11	J	2.8	MDL	18	MRL	ug/Kg	J	Z

Sample ID: SL-677C-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	37	J	17	MDL	52	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-652-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 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
DICAMBA	1.5	J	1.4	MDL	40	MRL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-650-SA6-SB-2.0-3.0 *Collected:* 11/27/2012 2:15:00 *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-METHYLNAPHTHALENE	0.32	J	0.30	MDL	9.7	MRL	ug/Kg	J	Z
ACENAPHTHENE	0.24	J	0.16	MDL	9.7	MRL	ug/Kg	J	Z

Sample ID: SL-651-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 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
1-METHYLNAPHTHALENE	2.3	J	0.28	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	3.0	J	0.33	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHENE	0.67	J	0.17	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	1.9	J	0.18	MDL	11	MRL	ug/Kg	J	Z
ANTHRACENE	4.9	J	0.78	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	6.7	J	0.97	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	5.6	J	0.80	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.8	J	1.2	MDL	11	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	8.0	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	0.94	J	0.51	MDL	11	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.7	J	1.2	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	1.9	J B	0.35	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-652-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 2:55:00 *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-METHYLNAPHTHALENE	0.89	J	0.26	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	2.4	J	0.31	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-652-SA6-SB-0.0-0.5 *Collected:* 11/27/2012 2:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.63	J	0.16	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.49	J	0.17	MDL	10	MRL	ug/Kg	J	Z
ANTHRACENE	1.7	J	0.72	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	2.3	J	0.90	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.74	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	7.1	J	1.2	MDL	10	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	3.6	J	1.1	MDL	10	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	2.0	J	1.0	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	9.4	J	1.0	MDL	10	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.0	J	1.1	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	2.3	J B	0.33	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	9.9	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: SL-652-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.27	J	0.16	MDL	10	MRL	ug/Kg	J	Z

Sample ID: SL-662-SA6-SB-3.5-4.5 *Collected:* 11/27/2012 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
2-METHYLNAPHTHALENE	0.36	J	0.32	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	0.35	J B	0.34	MDL	10	MRL	ug/Kg	U	B

Method Category: VOA

Method: 8015B GRO **Matrix: SO**

Sample ID: SL-661-SA6-SB-3.0 *Collected:* 11/27/2012 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
GASOLINE RANGE ORGANICS (C4-C12)	0.37	J	0.34	MDL	1.0	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **VOA**

Method: **8015B GRO** ***Matrix:*** **SO**

Sample ID: **SL-662-SA6-SB-4.0** ***Collected:*** **11/27/2012 9:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
GASOLINE RANGE ORGANICS (C4-C12)	0.37	J	0.36	MDL	1.1	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36311-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149787/1-A	12/4/2012 4:28:00 AM	CALCIUM STRONTIUM TIN	24.0 mg/Kg 0.0610 mg/Kg 1.09 mg/Kg	SL-650-SA6-SB-2.0-3.0 SL-651-SA6-SB-0.0-0.5 SL-652-SA6-SB-0.0-0.5 SL-652-SA6-SB-3.5-4.5 SL-661-SA6-SB-2.5-3.5 SL-662-SA6-SB-3.5-4.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-650-SA6-SB-2.0-3.0(RES/TOT)	TIN	2.1 mg/Kg	2.1U mg/Kg
SL-651-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.7 mg/Kg	1.7U mg/Kg
SL-652-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.7 mg/Kg	1.7U mg/Kg
SL-652-SA6-SB-3.5-4.5(RES/TOT)	TIN	1.8 mg/Kg	1.8U mg/Kg
SL-661-SA6-SB-2.5-3.5(RES/TOT)	TIN	1.7 mg/Kg	1.7U mg/Kg
SL-662-SA6-SB-3.5-4.5(RES/TOT)	TIN	1.8 mg/Kg	1.8U mg/Kg

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149786/1-A	12/3/2012 7:15:00 PM	THALLIUM	0.00410 mg/Kg	SL-650-SA6-SB-2.0-3.0 SL-651-SA6-SB-0.0-0.5 SL-652-SA6-SB-0.0-0.5 SL-652-SA6-SB-3.5-4.5 SL-661-SA6-SB-2.5-3.5 SL-662-SA6-SB-3.5-4.5

Method: 8015B EFH
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149599/1-A	12/6/2012 5:25:00 PM	TOTAL EFH(C8-C40)	0.786 mg/Kg	SL-650-SA6-SB-2.0-3.0 SL-651-SA6-SB-0.0-0.5 SL-652-SA6-SB-0.0-0.5 SL-652-SA6-SB-3.5-4.5 SL-661-SA6-SB-2.5-3.5 SL-662-SA6-SB-3.5-4.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-650-SA6-SB-2.0-3.0(RES)	TOTAL EFH(C8-C40)	1.3 mg/Kg	4.1U mg/Kg
SL-661-SA6-SB-2.5-3.5(RES)	TOTAL EFH(C8-C40)	0.90 mg/Kg	4.1U mg/Kg

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149561/1-A	12/4/2012 4:56:00 PM	NAPHTHALENE	0.320 ug/Kg	SL-650-SA6-SB-2.0-3.0 SL-651-SA6-SB-0.0-0.5 SL-652-SA6-SB-0.0-0.5 SL-652-SA6-SB-3.5-4.5 SL-661-SA6-SB-2.5-3.5 SL-662-SA6-SB-3.5-4.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-662-SA6-SB-3.5-4.5(RES)	NAPHTHALENE	0.35 ug/Kg	10U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB1-112912(RE2/TOT)	11/29/2012 3:00:00 PM	SODIUM Zirconium	0.19 mg/L 0.0036 mg/L	SL-650-SA6-SB-2.0-3.0 SL-650-SA6-SB-2.5 SL-651-SA6-SB-0.0-0.5 SL-652-SA6-SB-0.0-0.5 SL-652-SA6-SB-3.5-4.5 SL-652-SA6-SB-4.0 SL-661-SA6-SB-2.5-3.5 SL-661-SA6-SB-3.0 SL-662-SA6-SB-3.5-4.5 SL-662-SA6-SB-4.0
EB1-112912(RES/TOT)	11/29/2012 3:00:00 PM	IRON MAGNESIUM MANGANESE	0.88 mg/L 0.019 mg/L 0.0023 mg/L	SL-650-SA6-SB-2.0-3.0 SL-650-SA6-SB-2.5 SL-651-SA6-SB-0.0-0.5 SL-652-SA6-SB-0.0-0.5 SL-652-SA6-SB-3.5-4.5 SL-652-SA6-SB-4.0 SL-661-SA6-SB-2.5-3.5 SL-661-SA6-SB-3.0 SL-662-SA6-SB-3.5-4.5 SL-662-SA6-SB-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-650-SA6-SB-2.0-3.0(RES/TOT)	SODIUM	93 mg/Kg	93U mg/Kg
SL-650-SA6-SB-2.0-3.0(RES/TOT)	Zirconium	1.6 mg/Kg	1.6U mg/Kg
SL-651-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	91 mg/Kg	91U mg/Kg
SL-651-SA6-SB-0.0-0.5(RES/TOT)	Zirconium	1.8 mg/Kg	1.8U mg/Kg
SL-652-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	76 mg/Kg	76U mg/Kg
SL-652-SA6-SB-0.0-0.5(RES/TOT)	Zirconium	1.6 mg/Kg	1.6U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	BORON SODIUM	0.024 mg/L 0.17 mg/L	SL-650-SA6-SB-2.0-3.0 SL-650-SA6-SB-2.5 SL-651-SA6-SB-0.0-0.5 SL-652-SA6-SB-0.0-0.5 SL-652-SA6-SB-3.5-4.5 SL-652-SA6-SB-4.0 SL-661-SA6-SB-2.5-3.5 SL-661-SA6-SB-3.0 SL-662-SA6-SB-3.5-4.5 SL-662-SA6-SB-4.0 SL-677A-SA6-SB-0.0-0.5 SL-677B-SA6-SB-0.0-0.5 SL-677C-SA6-SB-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-650-SA6-SB-2.0-3.0(RES/TOT)	BORON	0.98 mg/Kg	0.98U mg/Kg
SL-651-SA6-SB-0.0-0.5(RES/TOT)	BORON	2.4 mg/Kg	2.4U mg/Kg
SL-652-SA6-SB-0.0-0.5(RES/TOT)	BORON	2.5 mg/Kg	2.5U mg/Kg
SL-652-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	76 mg/Kg	76U mg/Kg
SL-652-SA6-SB-3.5-4.5(RES/TOT)	BORON	1.7 mg/Kg	1.7U mg/Kg
SL-661-SA6-SB-2.5-3.5(RES/TOT)	BORON	1.0 mg/Kg	1.0U mg/Kg
SL-662-SA6-SB-3.5-4.5(RES/TOT)	BORON	1.1 mg/Kg	1.1U mg/Kg

Method: 6020A
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	SILVER	0.00078 mg/L	SL-650-SA6-SB-2.0-3.0 SL-650-SA6-SB-2.5 SL-651-SA6-SB-0.0-0.5 SL-652-SA6-SB-0.0-0.5 SL-652-SA6-SB-3.5-4.5 SL-652-SA6-SB-4.0 SL-661-SA6-SB-2.5-3.5 SL-661-SA6-SB-3.0 SL-662-SA6-SB-3.5-4.5 SL-662-SA6-SB-4.0 SL-677A-SA6-SB-0.0-0.5 SL-677B-SA6-SB-0.0-0.5 SL-677C-SA6-SB-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-650-SA6-SB-2.0-3.0(RES/TOT)	SILVER	0.039 mg/Kg	0.039U mg/Kg
SL-651-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.27 mg/Kg	0.27U mg/Kg
SL-652-SA6-SB-3.5-4.5(RES/TOT)	SILVER	0.079 mg/Kg	0.079U mg/Kg
SL-661-SA6-SB-2.5-3.5(RES/TOT)	SILVER	0.076 mg/Kg	0.076U mg/Kg
SL-662-SA6-SB-3.5-4.5(RES/TOT)	SILVER	0.048 mg/Kg	0.048U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-662-SA6-SB-3.5-4.5MS (TOT) SL-662-SA6-SB-3.5-4.5MSD (TOT) (SL-650-SA6-SB-2.0-3.0 SL -651-SA6-SB-0.0-0.5 SL -652-SA6-SB-0.0-0.5 SL -652-SA6-SB-3.5-4.5 SL -661-SA6-SB-2.5-3.5 SL -662-SA6-SB-3.5-4.5)	ANTIMONY	5	5	75.00-125.00	-	ANTIMONY	J (all detects) UJ(all non-detects) Post Spike = 99%
SL-662-SA6-SB-3.5-4.5MSD (TOT) (SL-650-SA6-SB-2.0-3.0 SL -651-SA6-SB-0.0-0.5 SL -652-SA6-SB-0.0-0.5 SL -652-SA6-SB-3.5-4.5 SL -661-SA6-SB-2.5-3.5 SL -662-SA6-SB-3.5-4.5)	COBALT	-	161	75.00-125.00	38 (20.00)	COBALT	J(all detects) UJ(all non-detects)

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-662-SA6-SB-3.5-4.5MS (TOT) SL-662-SA6-SB-3.5-4.5MSD (TOT) (SL-650-SA6-SB-2.0-3.0 SL -651-SA6-SB-0.0-0.5 SL -652-SA6-SB-0.0-0.5 SL -652-SA6-SB-3.5-4.5 SL -661-SA6-SB-2.5-3.5 SL -662-SA6-SB-3.5-4.5)	ALUMINUM IRON TITANIUM	3004 1186 214	2446 588 185	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM IRON TITANIUM	No Qual, >4x

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-650-SA6-SB-2.0-3.0	BORON	J	0.98	9.4	MRL	mg/Kg	
	LITHIUM	J ^	17	36	MRL	mg/Kg	
	MANGANESE	J	180	480	MRL	mg/Kg	
	POTASSIUM	J	2100	6200	MRL	mg/Kg	J (all detects)
	SODIUM	J	93	480	MRL	mg/Kg	
	TIN	J B	2.1	11	MRL	mg/Kg	
	Zirconium	J	1.6	8.3	MRL	mg/Kg	
SL-651-SA6-SB-0.0-0.5	ALUMINUM	J	12000	19000	MRL	mg/Kg	
	BORON	J	2.4	9.4	MRL	mg/Kg	
	LITHIUM	J ^	17	36	MRL	mg/Kg	
	MANGANESE	J	230	480	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3000	6200	MRL	mg/Kg	
	SODIUM	J	91	490	MRL	mg/Kg	
	TIN	J B	1.7	11	MRL	mg/Kg	
	Zirconium	J	1.8	8.4	MRL	mg/Kg	
SL-652-SA6-SB-0.0-0.5	ALUMINUM	J	12000	18000	MRL	mg/Kg	
	BORON	J	2.5	8.8	MRL	mg/Kg	
	LITHIUM	J ^	18	33	MRL	mg/Kg	
	MANGANESE	J	240	450	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3100	5800	MRL	mg/Kg	
	SODIUM	J	76	450	MRL	mg/Kg	
	TIN	J B	1.7	9.9	MRL	mg/Kg	
	Zirconium	J	1.6	7.8	MRL	mg/Kg	
SL-652-SA6-SB-3.5-4.5	ALUMINUM	J	16000	19000	MRL	mg/Kg	
	BORON	J	1.7	9.1	MRL	mg/Kg	
	LITHIUM	J ^	22	35	MRL	mg/Kg	
	MANGANESE	J	280	460	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2600	6000	MRL	mg/Kg	
	SODIUM	J	100	470	MRL	mg/Kg	
	TIN	J B	1.8	10	MRL	mg/Kg	
	Zirconium	J	2.0	8.1	MRL	mg/Kg	
SL-661-SA6-SB-2.5-3.5	ALUMINUM	J	16000	18000	MRL	mg/Kg	
	BORON	J	1.0	8.6	MRL	mg/Kg	
	LITHIUM	J ^	18	33	MRL	mg/Kg	
	MANGANESE	J	230	440	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2100	5700	MRL	mg/Kg	
	SODIUM	J	100	440	MRL	mg/Kg	
	TIN	J B	1.7	9.7	MRL	mg/Kg	
	Zirconium	J	2.1	7.6	MRL	mg/Kg	
SL-662-SA6-SB-3.5-4.5	ALUMINUM	J	16000	19000	MRL	mg/Kg	
	BORON	J	1.1	9.1	MRL	mg/Kg	
	LITHIUM	J	19	35	MRL	mg/Kg	
	MANGANESE	J	170	460	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	1600	6000	MRL	mg/Kg	
	SODIUM	J	110	470	MRL	mg/Kg	
	TIN	J B	1.8	10	MRL	mg/Kg	
	Zirconium	J	1.9	8.0	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-650-SA6-SB-2.0-3.0	ARSENIC	J	6.3	15	MRL	mg/Kg	
	BARIUM	J	85	140	MRL	mg/Kg	
	BERYLLIUM	J	0.88	1.1	MRL	mg/Kg	
	CADMIUM	J	0.042	0.98	MRL	mg/Kg	
	CHROMIUM	J	19	36	MRL	mg/Kg	
	COBALT	J	4.8	21	MRL	mg/Kg	
	COPPER	J	6.6	29	MRL	mg/Kg	
	LEAD	J	6.0	33	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.26	5.2	MRL	mg/Kg	
	NICKEL	J	9.9	29	MRL	mg/Kg	
	SELENIUM	J	0.17	0.64	MRL	mg/Kg	
	SILVER	J	0.039	0.78	MRL	mg/Kg	
	THALLIUM	J B	0.24	0.45	MRL	mg/Kg	
	VANADIUM	J	37	61	MRL	mg/Kg	
	ZINC	J	43	110	MRL	mg/Kg	
SL-651-SA6-SB-0.0-0.5	ANTIMONY	J	0.016	9.2	MRL	mg/Kg	
	ARSENIC	J	4.2	16	MRL	mg/Kg	
	BARIUM	J	90	150	MRL	mg/Kg	
	BERYLLIUM	J	0.51	1.2	MRL	mg/Kg	
	CADMIUM	J	0.29	1.1	MRL	mg/Kg	
	CHROMIUM	J	15	39	MRL	mg/Kg	
	COBALT	J	4.7	22	MRL	mg/Kg	
	COPPER	J	8.8	31	MRL	mg/Kg	J (all detects)
	LEAD	J	28	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.40	5.6	MRL	mg/Kg	
	NICKEL	J	10	31	MRL	mg/Kg	
	SILVER	J	0.27	0.83	MRL	mg/Kg	
	THALLIUM	J B	0.21	0.49	MRL	mg/Kg	
	VANADIUM	J	28	65	MRL	mg/Kg	
	ZINC	J	74	120	MRL	mg/Kg	
SL-652-SA6-SB-0.0-0.5	ANTIMONY	J	0.053	8.3	MRL	mg/Kg	
	ARSENIC	J	3.6	14	MRL	mg/Kg	
	BARIUM	J	80	130	MRL	mg/Kg	
	BERYLLIUM	J	0.48	1.1	MRL	mg/Kg	
	CHROMIUM	J	15	35	MRL	mg/Kg	
	COBALT	J	4.5	20	MRL	mg/Kg	
	COPPER	J	10	28	MRL	mg/Kg	J (all detects)
	LEAD	J	17	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.37	5.1	MRL	mg/Kg	
	NICKEL	J	11	28	MRL	mg/Kg	
	SILVER	J	0.43	0.75	MRL	mg/Kg	
	THALLIUM	J B	0.20	0.44	MRL	mg/Kg	
	VANADIUM	J	27	59	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-652-SA6-SB-3.5-4.5	ANTIMONY	J	0.013	7.7	MRL	mg/Kg	
	ARSENIC	J	4.5	13	MRL	mg/Kg	
	BARIUM	J	97	120	MRL	mg/Kg	
	BERYLLIUM	J	0.79	0.98	MRL	mg/Kg	
	CADMIUM	J	0.13	0.89	MRL	mg/Kg	
	CHROMIUM	J	19	33	MRL	mg/Kg	
	COBALT	J	5.5	19	MRL	mg/Kg	
	COPPER	J	7.8	26	MRL	mg/Kg	J (all detects)
	LEAD	J	6.2	30	MRL	mg/Kg	
	MOLYBDENUM	J	0.33	4.7	MRL	mg/Kg	
	NICKEL	J	12	26	MRL	mg/Kg	
	SILVER	J	0.079	0.70	MRL	mg/Kg	
	THALLIUM	J B	0.25	0.41	MRL	mg/Kg	
	VANADIUM	J	36	55	MRL	mg/Kg	
	ZINC	J	48	98	MRL	mg/Kg	
SL-661-SA6-SB-2.5-3.5	ANTIMONY	J	1.1	8.5	MRL	mg/Kg	
	ARSENIC	J	3.4	15	MRL	mg/Kg	
	BARIUM	J	85	140	MRL	mg/Kg	
	BERYLLIUM	J	0.64	1.1	MRL	mg/Kg	
	CADMIUM	J	0.098	0.98	MRL	mg/Kg	
	CHROMIUM	J	16	36	MRL	mg/Kg	
	COBALT	J	5.2	21	MRL	mg/Kg	
	COPPER	J	6.1	28	MRL	mg/Kg	J (all detects)
	LEAD	J	9.6	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.37	5.2	MRL	mg/Kg	
	NICKEL	J	9.4	28	MRL	mg/Kg	
	SILVER	J	0.076	0.77	MRL	mg/Kg	
	THALLIUM	J B	0.23	0.45	MRL	mg/Kg	
	VANADIUM	J	32	61	MRL	mg/Kg	
	ZINC	J	39	110	MRL	mg/Kg	
SL-662-SA6-SB-3.5-4.5	ANTIMONY	J	0.022	9.0	MRL	mg/Kg	
	ARSENIC	J	4.2	16	MRL	mg/Kg	
	BARIUM	J	84	150	MRL	mg/Kg	
	BERYLLIUM	J	0.75	1.1	MRL	mg/Kg	
	CADMIUM	J	0.057	1.0	MRL	mg/Kg	
	CHROMIUM	J	18	38	MRL	mg/Kg	
	COBALT	J	5.0	22	MRL	mg/Kg	
	COPPER	J	5.9	30	MRL	mg/Kg	
	LEAD	J	5.0	35	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.34	5.5	MRL	mg/Kg	
	NICKEL	J	9.0	30	MRL	mg/Kg	
	SELENIUM	J	0.15	0.68	MRL	mg/Kg	
	SILVER	J	0.048	0.82	MRL	mg/Kg	
	THALLIUM	J B	0.24	0.48	MRL	mg/Kg	
	VANADIUM	J	38	64	MRL	mg/Kg	
	ZINC	J	40	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-650-SA6-SB-2.0-3.0	MERCURY	J	0.016	0.025	MRL	mg/Kg	J (all detects)
SL-652-SA6-SB-0.0-0.5	MERCURY	J	0.017	0.022	MRL	mg/Kg	J (all detects)
SL-652-SA6-SB-3.5-4.5	MERCURY	J	0.0081	0.022	MRL	mg/Kg	J (all detects)
SL-661-SA6-SB-2.5-3.5	MERCURY	J	0.0088	0.024	MRL	mg/Kg	J (all detects)
SL-662-SA6-SB-3.5-4.5	MERCURY	J	0.013	0.023	MRL	mg/Kg	J (all detects)

Method: 8015B EFH
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-650-SA6-SB-2.0-3.0	TOTAL EFH(C8-C40)	J B	1.3	4.1	MRL	mg/Kg	J (all detects)
SL-652-SA6-SB-3.5-4.5	EFH(C30-C40)	J	3.2	10	MRL	mg/Kg	J (all detects)
SL-661-SA6-SB-2.5-3.5	TOTAL EFH(C8-C40)	J B	0.90	4.1	MRL	mg/Kg	J (all detects)

Method: 8015B GRO
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-661-SA6-SB-3.0	GASOLINE RANGE ORGANICS (C4-C12)	J	0.37	1.0	MRL	mg/Kg	J (all detects)
SL-662-SA6-SB-4.0	GASOLINE RANGE ORGANICS (C4-C12)	J	0.37	1.1	MRL	mg/Kg	J (all detects)

Method: 8082A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-677A-SA6-SB-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	15 11	18 18	MRL MRL	ug/Kg ug/Kg	J (all detects)
SL-677C-SA6-SB-0.0-0.5	Aroclor 5460	J	37	52	MRL	ug/Kg	J (all detects)

Method: 8151A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-652-SA6-SB-3.5-4.5	DICAMBA	J	1.5	40	MRL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36311-1 **Laboratory: TA DEN**

EDD Filename: 280-36311-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-650-SA6-SB-2.0-3.0	2-METHYLNAPHTHALENE	J	0.32	9.7	MRL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	0.24	9.7	MRL	ug/Kg	
SL-651-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	2.3	11	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	3.0	11	MRL	ug/Kg	
	ACENAPHTHENE	J	0.67	11	MRL	ug/Kg	
	ACENAPHTHYLENE	J	1.9	11	MRL	ug/Kg	
	ANTHRACENE	J	4.9	11	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	6.7	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	5.6	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.8	11	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	8.0	11	MRL	ug/Kg	
	FLUORENE	J	0.94	11	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	5.7	11	MRL	ug/Kg	
	NAPHTHALENE	J B	1.9	11	MRL	ug/Kg	
SL-652-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.89	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	2.4	10	MRL	ug/Kg	
	ACENAPHTHENE	J	0.63	10	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.49	10	MRL	ug/Kg	
	ANTHRACENE	J	1.7	10	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	2.3	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	7.1	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	3.6	10	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	2.0	10	MRL	ug/Kg	
	CHRYSENE	J	9.4	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	2.0	10	MRL	ug/Kg	
	NAPHTHALENE	J B	2.3	10	MRL	ug/Kg	
	PHENANTHRENE	J	9.9	10	MRL	ug/Kg	
SL-652-SA6-SB-3.5-4.5	ACENAPHTHENE	J	0.27	10	MRL	ug/Kg	J (all detects)
SL-662-SA6-SB-3.5-4.5	2-METHYLNAPHTHALENE	J	0.36	10	MRL	ug/Kg	J (all detects)
	NAPHTHALENE	J B	0.35	10	MRL	ug/Kg	

LDC #: 29419X4
SDG #: 280-36311-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/2/13
Page: 1 of 1
Reviewer: 02
2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/28/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (Al, Fe, Ti, ~~Ba~~ 74X, SbPS = Cl 9% (J/UJ)
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	~~N~~ A	
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	SW	EB= EB1-112912, ~~EB2-112912~~ FB= FB-111412 (280-35930-1), (280-36428-1)

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

Validated Samples:

1	SL-662-SA6-SB-3.5-4.5	11		21		31	
2	SL-661-SA6-SB-2.5-3.5	12		22		32	
3	SL-650-SA6-SB-2.0-3.0	13		23		33	
4	SL-651-SA6-SB-0.0-0.5	14		24		34	
5	SL-652-SA6-SB-0.0-0.5	15		25		35	
6	SL-652-SA6-SB-3.2-4.5	16		26		36	
7	SL-662-SA6-SB-3.5-4.5MS	17		27		37	
8	SL-662-SA6-SB-3.5-4.5MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 29419X4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CA
2nd Reviewer: M

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/29/12 Soil factor applied 100x; Hg=83x
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All

Analyte	Blank ID	Blank ID		Sample Identification									
	EB1-112912 (SDG: 280-36428-1)	~~EB2-112912 (SDG: 280-36428-1)~~	Action Limit	3	4	5							
Ca		~~0.037~~	~~18.5~~										
Fe	0.88	~~0.67~~	440										
Mg	0.019		9.5										
Mn	0.0023	~~0.0016~~	1.15										
Na	0.19	0.10	95	93	91	76							
Zr	0.0036		1.8	1.6	1.8	1.6							

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 #: 29419X4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/14/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification										
	FB-111412 (SDG:280-35930-1)	Action Limit	1	2	3	4	5	6				
B	0.024	12	1.1	1.0	0.98	2.4	2.5	1.7				
Na	0.17	85					76					
Ag	0.00078	0.39	0.048	0.076	0.039	0.27		0.079				

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-36112-2

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
27-Nov-2012	SL-662-SA6-SB-3.5-4.5	280-36311-3	N	1613	1613B	III
27-Nov-2012	SL-661-SA6-SB-2.5-3.5	280-36311-7	N	1613	1613B	III
27-Nov-2012	SL-651-SA6-SB-0.0-0.5	280-36311-15	N	1613	1613B	III
27-Nov-2012	SL-650-SA6-SB-2.0-3.0	280-36311-12	N	1613	1613B	III
27-Nov-2012	SL-652-SA6-SB-0.0-0.5	280-36311-17	N	1613	1613B	III
27-Nov-2012	SL-652-SA6-SB-3.5-4.5	280-36311-19	N	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-2 **Laboratory: TA DEN**

EDD Filename: 280-36311-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-650-SA6-SB-2.0-3.0** ***Collected:*** **11/27/2012 2:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.11	Q J	0.050	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.030	Q J	0.037	MDL	5.0	MRL	ng/kg	J	Z
OCDD	1.7	B J	0.055	MDL	10	MRL	ng/kg	J	Z
OCDF	0.13	Q J	0.053	MDL	10	MRL	ng/kg	J	Z

Sample ID: **SL-651-SA6-SB-0.0-0.5** ***Collected:*** **11/27/2012 1:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	4.0	J	0.21	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	4.8	J	0.20	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	2.4	J	0.13	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	3.7	Q J	0.13	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	2.3	Q J	0.28	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.37	Q J	0.18	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	2.2	J	0.13	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.72	J	0.15	MDL	5.3	MRL	ng/kg	J	Z
2,3,7,8-TCDD	0.27	Q J	0.31	MDL	1.1	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.66	J	0.24	MDL	1.1	MRL	ng/kg	J	Z
OCDD	4900	B E	0.21	MDL	11	MRL	ng/kg	J	*XI

Sample ID: **SL-652-SA6-SB-0.0-0.5** ***Collected:*** **11/27/2012 2:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	3.5	Q J	0.29	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	1.3	Q J	0.41	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	2.8	J	0.46	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	3.7	C J	0.41	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.30	Q J	0.41	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.79	Q J	0.48	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	3.5	J	0.41	MDL	5.1	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	1.1	Q J	0.36	MDL	5.1	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-2 **Laboratory: TA DEN**

EDD Filename: 280-36311-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-652-SA6-SB-3.5-4.5 **Collected:** 11/27/2012 3:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.5	J	0.20	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.78	J	0.12	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.26	Q J	0.18	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.10	J	0.088	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.30	Q J	0.14	MDL	5.0	MRL	ng/kg	J	Z
OCDF	1.7	J	0.16	MDL	10	MRL	ng/kg	J	Z

Sample ID: SL-661-SA6-SB-2.5-3.5 **Collected:** 11/27/2012 9:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.5	J	0.085	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.30	J	0.068	MDL	5.0	MRL	ng/kg	J	Z
OCDF	0.27	J	0.092	MDL	10	MRL	ng/kg	J	Z

Sample ID: SL-662-SA6-SB-3.5-4.5 **Collected:** 11/27/2012 8:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.7	J	0.077	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.24	Q J	0.058	MDL	5.2	MRL	ng/kg	J	Z
OCDF	0.83	S J	0.057	MDL	10	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36311-2

Laboratory: TA DEN

EDD Filename: 280-36311-2

eQAPP Name: CDM_SSFL_120907_TA

Reason Code Legend

Reason Code	*Description*
*XI	Exceeded Calibration Range
A	Professional Judgment
B	Method Blank Contamination
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36311-2/
H2K300406

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36311-2 **Laboratory: TA DEN**

EDD Filename: 280-36311-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-650-SA6-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	Q J	0.11	5.0	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDF	Q J	0.030	5.0	MRL	ng/kg	
	OCDD	B J	1.7	10	MRL	ng/kg	
	OCDF	Q J	0.13	10	MRL	ng/kg	
SL-651-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	4.0	5.3	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	4.8	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	2.4	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	3.7	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	2.3	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q J	0.37	5.3	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	J	2.2	5.3	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.72	5.3	MRL	ng/kg	
	2,3,7,8-TCDD	Q J	0.27	1.1	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.66	1.1	MRL	ng/kg	
SL-652-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	Q J	3.5	5.1	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	Q J	1.3	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	2.8	5.1	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	3.7	5.1	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.30	5.1	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.79	5.1	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	3.5	5.1	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	1.1	5.1	MRL	ng/kg	
SL-652-SA6-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	J	4.5	5.0	MRL	ng/kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	J	0.78	5.0	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	Q J	0.26	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.10	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	Q J	0.30	5.0	MRL	ng/kg	
	OCDF	J	1.7	10	MRL	ng/kg	
SL-661-SA6-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	J	1.5	5.0	MRL	ng/kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	J	0.30	5.0	MRL	ng/kg	
	OCDF	J	0.27	10	MRL	ng/kg	
SL-662-SA6-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	J	1.7	5.2	MRL	ng/kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	Q J	0.24	5.2	MRL	ng/kg	
	OCDF	S J	0.83	10	MRL	ng/kg	

SAMPLE DELIVERY GROUP

280-36365-1

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Nov-2012	TB-112812	280-36365-1	TB	METHOD	8015B GRO	III
28-Nov-2012	SL-506-SA6-SB-0.0-0.5-RS	280-36365-2	N	3550C	8015B EFH	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-4	N	3546	8270C SIM	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-4	N	3550C	8015B EFH	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-4MS	MS	3546	8270C SIM	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-4MS	MS	3550C	8015B EFH	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-4MSD	MSD	3546	8270C SIM	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-4MSD	MSD	3550C	8015B EFH	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	3050B	6010C	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	3050B	6020A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	3546	8082A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	7471B	7471B	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5MS	MS	3050B	6010C	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5MS	MS	3050B	6020A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5MS	MS	3546	8082A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5MS	MS	7471B	7471B	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5MSD	MSD	3050B	6010C	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5MSD	MSD	3050B	6020A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5MSD	MSD	3546	8082A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5MSD	MSD	7471B	7471B	III
28-Nov-2012	SL-507-SA6-SB-3.5	280-36365-8	N	5035	8015B GRO	III
28-Nov-2012	SL-507-SA6-SB-3.5MS	280-36365-8MS	MS	5035	8015B GRO	III
28-Nov-2012	SL-507-SA6-SB-3.5MSD	280-36365-8MSD	MSD	5035	8015B GRO	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-6	FD	3546	8270C SIM	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-6	FD	3550C	8015B EFH	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	3050B	6010C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	3050B	6020A	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	3546	8082A	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	7471B	7471B	III
28-Nov-2012	SL-907-SA6-SB-3.5	280-36365-9	FD	5035	8015B GRO	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-10	N	3546	8270C SIM	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-10	N	3550C	8015B EFH	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	3050B	6010C	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	3050B	6020A	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	3546	8082A	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	7471B	7471B	III
28-Nov-2012	SL-522-SA6-SB-4.5	280-36365-12	N	5035	8015B GRO	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-16	N	3546	8270C SIM	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-16	N	3550C	8015B EFH	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	3050B	6010C	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	3050B	6020A	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	3546	8082A	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	7471B	7471B	III
28-Nov-2012	SL-511-SA6-SB-3.0	280-36365-18	N	5035	8015B GRO	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-13	N	3546	8270C SIM	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-13	N	3550C	8015B EFH	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	3050B	6010C	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	3050B	6020A	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	3546	8082A	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	7471B	7471B	III
28-Nov-2012	SL-513-SA6-SB-4.5	280-36365-15	N	5035	8015B GRO	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-22	N	3546	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
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-22	N	3550C	8015B EFH	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	3050B	6010C	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	3050B	6020A	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	3546	8082A	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	6860	6860	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	7471B	7471B	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-19	N	3546	8270C SIM	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-19	N	3550C	8015B EFH	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	3050B	6010C	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	3050B	6020A	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	3546	8082A	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	6860	6860	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	7471B	7471B	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0MS	280-36365-20MS	MS	6860	6860	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0MSD	280-36365-20MSD	MSD	6860	6860	III
28-Nov-2012	SL-517-SA6-SB-2.5	280-36365-21	N	5035	8015B GRO	III

III = EPA Level 3 Data Review *N = 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: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: GENCHEM

Method: 6860 **Matrix: SO**

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.35	J	0.040	MDL	5.5	MRL	ug/Kg	J	Z

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	1.5	J	0.95	MDL	9.4	MRL	mg/Kg	U	F
LITHIUM	23	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	270	J	0.097	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	2100	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	110	J	57	MDL	480	MRL	mg/Kg	J	Z
TIN	1.8	J	0.88	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.8	J	0.34	MDL	8.3	MRL	mg/Kg	U	F

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
LITHIUM	28	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	2000	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	100	J	61	MDL	520	MRL	mg/Kg	J	Z
TIN	1.9	J	0.94	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.7	J	0.36	MDL	8.9	MRL	mg/Kg	U	F

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-513-SA6-SB-4.0-5.0 ***Collected:*** 11/28/2012 1:30:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.0	J	1.0	MDL	10	MRL	mg/Kg	U	F
LITHIUM	23	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	250	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	2500	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	360	J	61	MDL	520	MRL	mg/Kg	J	Z
TIN	1.8	J	0.94	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.37	MDL	8.9	MRL	mg/Kg	U	F

Sample ID: SL-517-SA6-SB-0.0-0.5 ***Collected:*** 11/28/2012 2:10:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.2	J	1.0	MDL	9.9	MRL	mg/Kg	U	F
LITHIUM	21	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	2500	J	42	MDL	6500	MRL	mg/Kg	J	Z
SODIUM	140	J	60	MDL	510	MRL	mg/Kg	J	Z
TIN	1.7	J	0.93	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.5	J	0.36	MDL	8.8	MRL	mg/Kg	U	F

Sample ID: SL-517-SA6-SB-2.0-3.0 ***Collected:*** 11/28/2012 2:25:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	8500	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
LITHIUM	25	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.098	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	40	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	130	J	58	MDL	490	MRL	mg/Kg	J	Z
TIN	1.8	J	0.89	MDL	11	MRL	mg/Kg	J	Z
Zirconium	0.87	J	0.35	MDL	8.4	MRL	mg/Kg	U	F

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
LITHIUM	20	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	200	J	0.098	MDL	490	MRL	mg/Kg	J	Z
POTASSIUM	1400	J	40	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	100	J	58	MDL	490	MRL	mg/Kg	J	Z
TIN	1.7	J	0.90	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.35	MDL	8.5	MRL	mg/Kg	U	F

Sample ID: SL-907-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	1.5	J	0.90	MDL	8.9	MRL	mg/Kg	U	F
LITHIUM	23	J	0.27	MDL	34	MRL	mg/Kg	J	Z
MANGANESE	290	J	0.092	MDL	450	MRL	mg/Kg	J	Z
POTASSIUM	2200	J	38	MDL	5900	MRL	mg/Kg	J	Z
SODIUM	120	J	54	MDL	460	MRL	mg/Kg	J	Z
TIN	1.8	J	0.83	MDL	10	MRL	mg/Kg	J	Z
Zirconium	1.9	J	0.32	MDL	7.9	MRL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.015	J	0.014	MDL	9.0	MRL	mg/Kg	J	Z, Q
ARSENIC	9.8	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	100	J	0.073	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.75	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.17	J	0.0097	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.078	MDL	38	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.1	J	0.0068	MDL	22	MRL	mg/Kg	J	Z
COPPER	6.0	J	0.073	MDL	30	MRL	mg/Kg	J	Z
LEAD	5.1	J B	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.018	MDL	5.5	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.026	MDL	30	MRL	mg/Kg	J	Z
SILVER	0.056	J	0.021	MDL	0.82	MRL	mg/Kg	U	F
THALLIUM	0.25	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	34	J	0.040	MDL	64	MRL	mg/Kg	J	Z
ZINC	46	J	0.33	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.8	MRL	mg/Kg	UJ	Q
ARSENIC	4.5	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	67	J	0.071	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.62	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0095	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.077	MDL	37	MRL	mg/Kg	J	Z
COBALT	5.3	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	6.3	J	0.072	MDL	29	MRL	mg/Kg	J	Z
LEAD	5.2	J B	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.30	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	9.5	J B	0.026	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.029	J	0.021	MDL	0.80	MRL	mg/Kg	U	F
THALLIUM	0.22	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	39	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	46	J	0.32	MDL	110	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

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

Sample ID: SL-513-SA6-SB-4.0-5.0 ***Collected:*** 11/28/2012 1:30:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	J	0.014	MDL	8.6	MRL	mg/Kg	J	Z, Q
ARSENIC	3.8	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	71	J	0.070	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.51	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.15	J	0.0093	MDL	0.99	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.075	MDL	37	MRL	mg/Kg	J	Z
COBALT	5.4	J	0.0066	MDL	21	MRL	mg/Kg	J	Z
COPPER	7.7	J	0.071	MDL	29	MRL	mg/Kg	J	Z
LEAD	6.3	J B	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.46	J	0.017	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	10	J B	0.025	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.030	J	0.020	MDL	0.78	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	32	J	0.038	MDL	62	MRL	mg/Kg	J	Z
ZINC	52	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-517-SA6-SB-0.0-0.5 ***Collected:*** 11/28/2012 2:10:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	J	0.013	MDL	8.2	MRL	mg/Kg	J	Z, Q
ARSENIC	3.7	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	76	J	0.066	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.48	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.19	J	0.0088	MDL	0.94	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.071	MDL	35	MRL	mg/Kg	J	Z
COBALT	5.5	J	0.0062	MDL	20	MRL	mg/Kg	J	Z
COPPER	8.8	J	0.067	MDL	27	MRL	mg/Kg	J	Z
LEAD	4.9	J B	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.27	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	9.8	J B	0.024	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.031	J	0.019	MDL	0.74	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	32	J	0.036	MDL	58	MRL	mg/Kg	J	Z
ZINC	57	J	0.30	MDL	100	MRL	mg/Kg	J	Z

Sample ID: SL-517-SA6-SB-2.0-3.0 *Collected:* 11/28/2012 2:25:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.6	MRL	mg/Kg	UJ	Q
ARSENIC	3.8	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	63	J	0.070	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.42	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.11	J	0.0093	MDL	0.99	MRL	mg/Kg	J	Z
CHROMIUM	11	J	0.075	MDL	36	MRL	mg/Kg	J	Z
COBALT	4.3	J	0.0065	MDL	21	MRL	mg/Kg	J	Z
COPPER	4.6	J	0.070	MDL	29	MRL	mg/Kg	J	Z
LEAD	3.2	J B	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.20	J	0.017	MDL	5.2	MRL	mg/Kg	J	Z
NICKEL	7.1	J B	0.025	MDL	29	MRL	mg/Kg	J	Z
THALLIUM	0.24	J	0.0035	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	22	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	51	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.013	U	0.013	MDL	8.2	MRL	mg/Kg	UJ	Q
BARIUM	68	J	0.066	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.66	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.086	J	0.0088	MDL	0.94	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.071	MDL	35	MRL	mg/Kg	J	Z
COBALT	4.8	J	0.0062	MDL	20	MRL	mg/Kg	J	Z
COPPER	4.5	J	0.067	MDL	27	MRL	mg/Kg	J	Z
LEAD	4.7	J B	0.017	MDL	32	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.39	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	8.7	J B	0.024	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.032	J	0.019	MDL	0.74	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z
VANADIUM	31	J	0.036	MDL	58	MRL	mg/Kg	J	Z
ZINC	40	J	0.30	MDL	100	MRL	mg/Kg	J	Z

Sample ID: SL-907-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.013	J	0.013	MDL	8.0	MRL	mg/Kg	J	Z, Q
ARSENIC	9.8	J	0.047	MDL	14	MRL	mg/Kg	J	Z
BARIUM	98	J	0.065	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.69	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.17	J	0.0087	MDL	0.92	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.070	MDL	34	MRL	mg/Kg	J	Z
COBALT	6.1	J	0.0061	MDL	19	MRL	mg/Kg	J	Z
COPPER	6.0	J	0.066	MDL	27	MRL	mg/Kg	J	Z
LEAD	5.0	J B	0.017	MDL	31	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.016	MDL	4.9	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.023	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.051	J	0.019	MDL	0.73	MRL	mg/Kg	U	F
THALLIUM	0.24	J	0.0032	MDL	0.42	MRL	mg/Kg	J	Z
VANADIUM	33	J	0.036	MDL	57	MRL	mg/Kg	J	Z
ZINC	45	J	0.29	MDL	100	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.017	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.015	J	0.0062	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.014	J	0.0061	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.021	J	0.0066	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0096	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-907-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.016	J	0.0060	MDL	0.022	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-506-SA6-SB-0.0-0.5-RS *Collected:* 11/28/2012 8:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	1.5	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z
EFH(C21-C30)	2.8	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 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
EFH(C21-C30)	3.2	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z
EFH(C30-C40)	3.7	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	3.0	J	1.0	MDL	5.1	MRL	mg/Kg	J	Z
EFH(C30-C40)	4.7	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	1.3	J	0.98	MDL	4.9	MRL	mg/Kg	J	Z
EFH(C30-C40)	1.8	J	0.98	MDL	9.8	MRL	mg/Kg	J	Z
TOTAL EFH(C8-C40)	3.7	J B	0.66	MDL	3.9	MRL	mg/Kg	U	B

Sample ID: SL-517-SA6-SB-2.0-3.0 *Collected:* 11/28/2012 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	0.84	J B	0.69	MDL	4.1	MRL	mg/Kg	U	B

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	1.2	J B	0.70	MDL	4.1	MRL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-907-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 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
EFH(C21-C30)	2.4	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z
EFH(C30-C40)	3.7	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.33	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.44	J	0.32	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHENE	0.96	J	0.17	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.21	J	0.18	MDL	10	MRL	ug/Kg	J	Z
ANTHRACENE	0.81	J	0.75	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	5.6	J	0.94	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	5.9	J	0.78	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	9.0	J	1.3	MDL	10	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	2.5	J	1.0	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	9.0	J	1.0	MDL	10	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.6	J	1.4	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	8.7	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	0.57	J	0.49	MDL	10	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.3	J	1.2	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	0.51	J	0.34	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	4.0	J	1.2	MDL	10	MRL	ug/Kg	J	Z
PYRENE	7.4	J	1.2	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: VOA

Method: 8015B GRO **Matrix:** SO

Sample ID: SL-507-SA6-SB-3.5 **Collected:** 11/28/2012 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C4-C12)	0.51	J	0.31	MDL	0.96	MRL	mg/Kg	J	Z, FD

Sample ID: SL-907-SA6-SB-3.5 **Collected:** 11/28/2012 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
GASOLINE RANGE ORGANICS (C4-C12)	0.30	U	0.30	MDL	0.91	MRL	mg/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36365-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149925/1-A	12/3/2012 10:17:00 PM	LEAD NICKEL	0.0181 mg/Kg 0.0257 mg/Kg	SL-507-SA6-SB-3.0-4.0 SL-511-SA6-SB-2.5-3.5 SL-513-SA6-SB-4.0-5.0 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-522-SA6-SB-4.0-5.0 SL-907-SA6-SB-3.0-4.0

Method: 8015B EFH
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149937/1-A	12/7/2012 12:18:00 AM	TOTAL EFH(C8-C40)	1.02 mg/Kg	SL-506-SA6-SB-0.0-0.5-RS SL-507-SA6-SB-3.0-4.0 SL-511-SA6-SB-2.5-3.5 SL-513-SA6-SB-4.0-5.0 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-522-SA6-SB-4.0-5.0 SL-907-SA6-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-513-SA6-SB-4.0-5.0(RES)	TOTAL EFH(C8-C40)	3.7 mg/Kg	3.9U mg/Kg
SL-517-SA6-SB-2.0-3.0(RES)	TOTAL EFH(C8-C40)	0.84 mg/Kg	4.1U mg/Kg
SL-522-SA6-SB-4.0-5.0(RES)	TOTAL EFH(C8-C40)	1.2 mg/Kg	4.1U mg/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB1-112912(RE2/TOT)	11/29/2012 3:00:00 PM	SODIUM Zirconium	0.19 mg/L 0.0036 mg/L	SL-507-SA6-SB-3.0-4.0 SL-507-SA6-SB-3.5 SL-511-SA6-SB-2.5-3.5 SL-511-SA6-SB-3.0 SL-513-SA6-SB-4.0-5.0 SL-513-SA6-SB-4.5 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-2.5 SL-522-SA6-SB-4.0-5.0 SL-522-SA6-SB-4.5 SL-907-SA6-SB-3.0-4.0 SL-907-SA6-SB-3.5
EB1-112912(RES/TOT)	11/29/2012 3:00:00 PM	IRON MAGNESIUM MANGANESE	0.88 mg/L 0.019 mg/L 0.0023 mg/L	SL-507-SA6-SB-3.0-4.0 SL-507-SA6-SB-3.5 SL-511-SA6-SB-2.5-3.5 SL-511-SA6-SB-3.0 SL-513-SA6-SB-4.0-5.0 SL-513-SA6-SB-4.5 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-2.5 SL-522-SA6-SB-4.0-5.0 SL-522-SA6-SB-4.5 SL-907-SA6-SB-3.0-4.0 SL-907-SA6-SB-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-507-SA6-SB-3.0-4.0(RES/TOT)	Zirconium	1.8 mg/Kg	1.8U mg/Kg
SL-511-SA6-SB-2.5-3.5(RES/TOT)	Zirconium	1.7 mg/Kg	1.7U mg/Kg
SL-513-SA6-SB-4.0-5.0(RES/TOT)	Zirconium	1.4 mg/Kg	1.4U mg/Kg
SL-517-SA6-SB-0.0-0.5(RES/TOT)	Zirconium	1.5 mg/Kg	1.5U mg/Kg
SL-517-SA6-SB-2.0-3.0(RES/TOT)	Zirconium	0.87 mg/Kg	0.87U mg/Kg
SL-522-SA6-SB-4.0-5.0(RES/TOT)	Zirconium	1.4 mg/Kg	1.4U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	BORON SODIUM	0.024 mg/L 0.17 mg/L	SL-506-SA6-SB-0.0-0.5-RS SL-507-SA6-SB-3.0-4.0 SL-507-SA6-SB-3.5 SL-511-SA6-SB-2.5-3.5 SL-511-SA6-SB-3.0 SL-513-SA6-SB-4.0-5.0 SL-513-SA6-SB-4.5 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-2.5 SL-522-SA6-SB-4.0-5.0 SL-522-SA6-SB-4.5 SL-907-SA6-SB-3.0-4.0 SL-907-SA6-SB-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-507-SA6-SB-3.0-4.0(RES/TOT)	BORON	1.5 mg/Kg	1.5U mg/Kg
SL-513-SA6-SB-4.0-5.0(RES/TOT)	BORON	1.0 mg/Kg	1.0U mg/Kg
SL-517-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.2 mg/Kg	1.2U mg/Kg
SL-907-SA6-SB-3.0-4.0(RES/TOT)	BORON	1.5 mg/Kg	1.5U mg/Kg

Method: 6020A
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	SILVER	0.00078 mg/L	SL-506-SA6-SB-0.0-0.5-RS SL-507-SA6-SB-3.0-4.0 SL-507-SA6-SB-3.5 SL-511-SA6-SB-2.5-3.5 SL-511-SA6-SB-3.0 SL-513-SA6-SB-4.0-5.0 SL-513-SA6-SB-4.5 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-2.5 SL-522-SA6-SB-4.0-5.0 SL-522-SA6-SB-4.5 SL-907-SA6-SB-3.0-4.0 SL-907-SA6-SB-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-507-SA6-SB-3.0-4.0(RES/TOT)	SILVER	0.056 mg/Kg	0.056U mg/Kg
SL-511-SA6-SB-2.5-3.5(RES/TOT)	SILVER	0.029 mg/Kg	0.029U mg/Kg
SL-513-SA6-SB-4.0-5.0(RES/TOT)	SILVER	0.030 mg/Kg	0.030U mg/Kg
SL-517-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.031 mg/Kg	0.031U mg/Kg
SL-522-SA6-SB-4.0-5.0(RES/TOT)	SILVER	0.032 mg/Kg	0.032U mg/Kg
SL-907-SA6-SB-3.0-4.0(RES/TOT)	SILVER	0.051 mg/Kg	0.051U mg/Kg

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-507-SA6-SB-3.0-4.0MS (TOT) SL-507-SA6-SB-3.0-4.0MSD (TOT) (SL-507-SA6-SB-3.0-4.0 SL -511-SA6-SB-2.5-3.5 SL -513-SA6-SB-4.0-5.0 SL -517-SA6-SB-0.0-0.5 SL -517-SA6-SB-2.0-3.0 SL -522-SA6-SB-4.0-5.0 SL -907-SA6-SB-3.0-4.0)	ANTIMONY	5	4	75.00-125.00	-	ANTIMONY	J (all detects) UJ (all non-detects) Post Spike = 101%

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-507-SA6-SB-3.0-4.0MS (TOT) SL-507-SA6-SB-3.0-4.0MSD (TOT) (SL-507-SA6-SB-3.0-4.0 SL -511-SA6-SB-2.5-3.5 SL -513-SA6-SB-4.0-5.0 SL -517-SA6-SB-0.0-0.5 SL -517-SA6-SB-2.0-3.0 SL -522-SA6-SB-4.0-5.0 SL -907-SA6-SB-3.0-4.0)	ALUMINUM IRON MANGANESE TITANIUM	2930 1905 128 250	2599 1278 - 193	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM IRON MANGANESE TITANIUM	No Qual, >4x

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Analyte	Concentration (mg/Kg) SL-507-SA6-SB-3.0-4.0 (TOT)	Concentration (mg/Kg) SL-907-SA6-SB-3.0-4.0 (TOT)	Sample RPD	eQAPP RPD	Flag
ALUMINUM	16000	16000	0	50.00	
BORON	1.5	1.5	0	50.00	
CALCIUM	2100	2100	0	50.00	
IRON	19000	18000	5	50.00	
LITHIUM	23	23	0	50.00	
MAGNESIUM	4000	3900	3	50.00	
MANGANESE	270	290	7	50.00	
PHOSPHORUS	210	210	0	50.00	No Qualifiers Applied
POTASSIUM	2100	2200	5	50.00	
SODIUM	110	120	9	50.00	
STRONTIUM	19	19	0	50.00	
TIN	1.8	1.8	0	50.00	
TITANIUM	860	840	2	50.00	
Zirconium	1.8	1.9	5	50.00	

Method: 6020A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-507-SA6-SB-3.0-4.0 (TOT)	Concentration (mg/Kg) SL-907-SA6-SB-3.0-4.0 (TOT)	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.015	0.013	14	50.00	
ARSENIC	9.8	9.8	0	50.00	
BARIUM	100	98	2	50.00	
BERYLLIUM	0.75	0.69	8	50.00	
CADMIUM	0.17	0.17	0	50.00	
CHROMIUM	16	15	6	50.00	
COBALT	6.1	6.1	0	50.00	
COPPER	6.0	6.0	0	50.00	
LEAD	5.1	5.0	2	50.00	No Qualifiers Applied
MOLYBDENUM	0.42	0.42	0	50.00	
NICKEL	11	11	0	50.00	
SELENIUM	0.91	0.81	12	50.00	
SILVER	0.056	0.051	9	50.00	
THALLIUM	0.25	0.24	4	50.00	
VANADIUM	34	33	3	50.00	
ZINC	46	45	2	50.00	

Method: 7471B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-507-SA6-SB-3.0-4.0 (TOT)	Concentration (mg/Kg) SL-907-SA6-SB-3.0-4.0 (TOT)	Sample RPD	eQAPP RPD	Flag
MERCURY	0.017	0.016	6	50.00	No Qualifiers Applied

Method: 8015B EFH
Matrix: SO

Analyte	Concentration (mg/Kg) SL-507-SA6-SB-3.0-4.0	Concentration (mg/Kg) SL-907-SA6-SB-3.0-4.0	Sample RPD	eQAPP RPD	Flag
EFH(C21-C30)	3.2	2.4	29	50.00	
EFH(C30-C40)	3.7	3.7	0	50.00	No Qualifiers Applied
TOTAL EFH(C8-C40)	7.8	6.8	14	50.00	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B GRO
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-507-SA6-SB-3.5	SL-907-SA6-SB-3.5			
GASOLINE RANGE ORGANICS (C4-C12)	0.51	0.91 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045D
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-507-SA6-SB-3.0-4.0	SL-907-SA6-SB-3.0-4.0			
PH	7.40	7.88	6		No Qualifiers Applied
TEMPERATURE	20.9	20.8	0		

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA6-SB-3.0-4.0	ALUMINUM	J	16000	19000	MRL	mg/Kg	J (all detects)
	BORON	J	1.5	9.4	MRL	mg/Kg	
	LITHIUM	J	23	36	MRL	mg/Kg	
	MANGANESE	J	270	480	MRL	mg/Kg	
	POTASSIUM	J	2100	6200	MRL	mg/Kg	
	SODIUM	J	110	480	MRL	mg/Kg	
	TIN	J	1.8	11	MRL	mg/Kg	
	Zirconium	J	1.8	8.3	MRL	mg/Kg	
SL-511-SA6-SB-2.5-3.5	ALUMINUM	J	16000	21000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	28	38	MRL	mg/Kg	
	MANGANESE	J	240	510	MRL	mg/Kg	
	POTASSIUM	J	2000	6600	MRL	mg/Kg	
	SODIUM	J	100	520	MRL	mg/Kg	
	TIN	J	1.9	11	MRL	mg/Kg	
	Zirconium	J	1.7	8.9	MRL	mg/Kg	
SL-513-SA6-SB-4.0-5.0	ALUMINUM	J	12000	21000	MRL	mg/Kg	J (all detects)
	BORON	J	1.0	10	MRL	mg/Kg	
	LITHIUM	J	23	38	MRL	mg/Kg	
	MANGANESE	J	250	510	MRL	mg/Kg	
	POTASSIUM	J	2500	6600	MRL	mg/Kg	
	SODIUM	J	360	520	MRL	mg/Kg	
	TIN	J	1.8	11	MRL	mg/Kg	
	Zirconium	J	1.4	8.9	MRL	mg/Kg	
SL-517-SA6-SB-0.0-0.5	ALUMINUM	J	12000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	1.2	9.9	MRL	mg/Kg	
	LITHIUM	J	21	38	MRL	mg/Kg	
	MANGANESE	J	240	510	MRL	mg/Kg	
	POTASSIUM	J	2500	6500	MRL	mg/Kg	
	SODIUM	J	140	510	MRL	mg/Kg	
	TIN	J	1.7	11	MRL	mg/Kg	
	Zirconium	J	1.5	8.8	MRL	mg/Kg	
SL-517-SA6-SB-2.0-3.0	ALUMINUM	J	8500	20000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	25	36	MRL	mg/Kg	
	MANGANESE	J	240	480	MRL	mg/Kg	
	POTASSIUM	J	2700	6300	MRL	mg/Kg	
	SODIUM	J	130	490	MRL	mg/Kg	
	TIN	J	1.8	11	MRL	mg/Kg	
	Zirconium	J	0.87	8.4	MRL	mg/Kg	
SL-522-SA6-SB-4.0-5.0	ALUMINUM	J	15000	20000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	20	36	MRL	mg/Kg	
	MANGANESE	J	200	490	MRL	mg/Kg	
	POTASSIUM	J	1400	6300	MRL	mg/Kg	
	SODIUM	J	100	490	MRL	mg/Kg	
	TIN	J	1.7	11	MRL	mg/Kg	
	Zirconium	J	1.4	8.5	MRL	mg/Kg	
SL-907-SA6-SB-3.0-4.0	ALUMINUM	J	16000	18000	MRL	mg/Kg	J (all detects)
	BORON	J	1.5	8.9	MRL	mg/Kg	
	LITHIUM	J	23	34	MRL	mg/Kg	
	MANGANESE	J	290	450	MRL	mg/Kg	
	POTASSIUM	J	2200	5900	MRL	mg/Kg	
	SODIUM	J	120	460	MRL	mg/Kg	
	TIN	J	1.8	10	MRL	mg/Kg	
	Zirconium	J	1.9	7.9	MRL	mg/Kg	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA6-SB-3.0-4.0	ANTIMONY	J	0.015	9.0	MRL	mg/Kg	
	ARSENIC	J	9.8	15	MRL	mg/Kg	
	BARIUM	J	100	140	MRL	mg/Kg	
	BERYLLIUM	J	0.75	1.1	MRL	mg/Kg	
	CADMIUM	J	0.17	1.0	MRL	mg/Kg	
	CHROMIUM	J	16	38	MRL	mg/Kg	
	COBALT	J	6.1	22	MRL	mg/Kg	
	COPPER	J	6.0	30	MRL	mg/Kg	J (all detects)
	LEAD	J B	5.1	35	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	5.5	MRL	mg/Kg	
	NICKEL	J B	11	30	MRL	mg/Kg	
	SILVER	J	0.056	0.82	MRL	mg/Kg	
	THALLIUM	J	0.25	0.47	MRL	mg/Kg	
	VANADIUM	J	34	64	MRL	mg/Kg	
	ZINC	J	46	110	MRL	mg/Kg	
SL-511-SA6-SB-2.5-3.5	ARSENIC	J	4.5	15	MRL	mg/Kg	
	BARIUM	J	67	140	MRL	mg/Kg	
	BERYLLIUM	J	0.62	1.1	MRL	mg/Kg	
	CADMIUM	J	0.13	1.0	MRL	mg/Kg	
	CHROMIUM	J	16	37	MRL	mg/Kg	
	COBALT	J	5.3	21	MRL	mg/Kg	
	COPPER	J	6.3	29	MRL	mg/Kg	J (all detects)
	LEAD	J B	5.2	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.30	5.4	MRL	mg/Kg	
	NICKEL	J B	9.5	29	MRL	mg/Kg	
	SILVER	J	0.029	0.80	MRL	mg/Kg	
	THALLIUM	J	0.22	0.46	MRL	mg/Kg	
	VANADIUM	J	39	63	MRL	mg/Kg	
	ZINC	J	46	110	MRL	mg/Kg	
SL-513-SA6-SB-4.0-5.0	ANTIMONY	J	0.014	8.6	MRL	mg/Kg	
	ARSENIC	J	3.8	15	MRL	mg/Kg	
	BARIUM	J	71	140	MRL	mg/Kg	
	BERYLLIUM	J	0.51	1.1	MRL	mg/Kg	
	CADMIUM	J	0.15	0.99	MRL	mg/Kg	
	CHROMIUM	J	16	37	MRL	mg/Kg	
	COBALT	J	5.4	21	MRL	mg/Kg	
	COPPER	J	7.7	29	MRL	mg/Kg	J (all detects)
	LEAD	J B	6.3	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.46	5.3	MRL	mg/Kg	
	NICKEL	J B	10	29	MRL	mg/Kg	
	SILVER	J	0.030	0.78	MRL	mg/Kg	
	THALLIUM	J	0.23	0.46	MRL	mg/Kg	
	VANADIUM	J	32	62	MRL	mg/Kg	
	ZINC	J	52	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-SA6-SB-0.0-0.5	ANTIMONY	J	0.014	8.2	MRL	mg/Kg	
	ARSENIC	J	3.7	14	MRL	mg/Kg	
	BARIUM	J	76	130	MRL	mg/Kg	
	BERYLLIUM	J	0.48	1.0	MRL	mg/Kg	
	CADMIUM	J	0.19	0.94	MRL	mg/Kg	
	CHROMIUM	J	16	35	MRL	mg/Kg	
	COBALT	J	5.5	20	MRL	mg/Kg	
	COPPER	J	8.8	27	MRL	mg/Kg	J (all detects)
	LEAD	J B	4.9	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.27	5.0	MRL	mg/Kg	
	NICKEL	J B	9.8	27	MRL	mg/Kg	
	SILVER	J	0.031	0.74	MRL	mg/Kg	
	THALLIUM	J	0.23	0.43	MRL	mg/Kg	
	VANADIUM	J	32	58	MRL	mg/Kg	
	ZINC	J	57	100	MRL	mg/Kg	
SL-517-SA6-SB-2.0-3.0	ARSENIC	J	3.8	15	MRL	mg/Kg	
	BARIUM	J	63	140	MRL	mg/Kg	
	BERYLLIUM	J	0.42	1.1	MRL	mg/Kg	
	CADMIUM	J	0.11	0.99	MRL	mg/Kg	
	CHROMIUM	J	11	36	MRL	mg/Kg	
	COBALT	J	4.3	21	MRL	mg/Kg	
	COPPER	J	4.6	29	MRL	mg/Kg	J (all detects)
	LEAD	J B	3.2	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.20	5.2	MRL	mg/Kg	
	NICKEL	J B	7.1	29	MRL	mg/Kg	
	THALLIUM	J	0.24	0.45	MRL	mg/Kg	
	VANADIUM	J	22	61	MRL	mg/Kg	
	ZINC	J	51	110	MRL	mg/Kg	
SL-522-SA6-SB-4.0-5.0	BARIUM	J	68	130	MRL	mg/Kg	
	BERYLLIUM	J	0.66	1.0	MRL	mg/Kg	
	CADMIUM	J	0.086	0.94	MRL	mg/Kg	
	CHROMIUM	J	15	35	MRL	mg/Kg	
	COBALT	J	4.8	20	MRL	mg/Kg	
	COPPER	J	4.5	27	MRL	mg/Kg	
	LEAD	J B	4.7	32	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.39	5.0	MRL	mg/Kg	
	NICKEL	J B	8.7	27	MRL	mg/Kg	
	SILVER	J	0.032	0.74	MRL	mg/Kg	
	THALLIUM	J	0.23	0.43	MRL	mg/Kg	
	VANADIUM	J	31	58	MRL	mg/Kg	
	ZINC	J	40	100	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-907-SA6-SB-3.0-4.0	ANTIMONY	J	0.013	8.0	MRL	mg/Kg	
	ARSENIC	J	9.8	14	MRL	mg/Kg	
	BARIUM	J	98	130	MRL	mg/Kg	
	BERYLLIUM	J	0.69	1.0	MRL	mg/Kg	
	CADMIUM	J	0.17	0.92	MRL	mg/Kg	
	CHROMIUM	J	15	34	MRL	mg/Kg	
	COBALT	J	6.1	19	MRL	mg/Kg	
	COPPER	J	6.0	27	MRL	mg/Kg	J (all detects)
	LEAD	J B	5.0	31	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	4.9	MRL	mg/Kg	
	NICKEL	J B	11	27	MRL	mg/Kg	
	SILVER	J	0.051	0.73	MRL	mg/Kg	
	THALLIUM	J	0.24	0.42	MRL	mg/Kg	
	VANADIUM	J	33	57	MRL	mg/Kg	
	ZINC	J	45	100	MRL	mg/Kg	

Method: 6860

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-SA6-SB-0.0-0.5	PERCHLORATE	J	0.35	5.5	MRL	ug/Kg	J (all detects)

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA6-SB-3.0-4.0	MERCURY	J	0.017	0.023	MRL	mg/Kg	J (all detects)
SL-511-SA6-SB-2.5-3.5	MERCURY	J	0.015	0.022	MRL	mg/Kg	J (all detects)
SL-513-SA6-SB-4.0-5.0	MERCURY	J	0.014	0.022	MRL	mg/Kg	J (all detects)
SL-517-SA6-SB-0.0-0.5	MERCURY	J	0.021	0.024	MRL	mg/Kg	J (all detects)
SL-522-SA6-SB-4.0-5.0	MERCURY	J	0.0096	0.023	MRL	mg/Kg	J (all detects)
SL-907-SA6-SB-3.0-4.0	MERCURY	J	0.016	0.022	MRL	mg/Kg	J (all detects)

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-506-SA6-SB-0.0-0.5-RS	EFH(C15-C20)	J	1.5	5.4	MRL	mg/Kg	J (all detects)
	EFH(C21-C30)	J	2.8	5.4	MRL	mg/Kg	
SL-507-SA6-SB-3.0-4.0	EFH(C21-C30)	J	3.2	5.2	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	3.7	10	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA6-SB-2.5-3.5	EFH(C21-C30)	J	3.0	5.1	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	4.7	10	MRL	mg/Kg	
SL-513-SA6-SB-4.0-5.0	EFH(C21-C30)	J	1.3	4.9	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	1.8	9.8	MRL	mg/Kg	
	TOTAL EFH(C8-C40)	J B	3.7	3.9	MRL	mg/Kg	
SL-517-SA6-SB-2.0-3.0	TOTAL EFH(C8-C40)	J B	0.84	4.1	MRL	mg/Kg	J (all detects)
SL-522-SA6-SB-4.0-5.0	TOTAL EFH(C8-C40)	J B	1.2	4.1	MRL	mg/Kg	J (all detects)
SL-907-SA6-SB-3.0-4.0	EFH(C21-C30)	J	2.4	5.2	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	3.7	10	MRL	mg/Kg	

Method: 8015B GRO

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA6-SB-3.5	GASOLINE RANGE ORGANICS (C4-C12)	J	0.51	0.96	MRL	mg/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.33	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.44	10	MRL	ug/Kg	
	ACENAPHTHENE	J	0.96	10	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.21	10	MRL	ug/Kg	
	ANTHRACENE	J	0.81	10	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	5.6	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	5.9	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	9.0	10	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	2.5	10	MRL	ug/Kg	
	CHRYSENE	J	9.0	10	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.6	10	MRL	ug/Kg	
	FLUORANTHENE	J	8.7	10	MRL	ug/Kg	
	FLUORENE	J	0.57	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	5.3	10	MRL	ug/Kg	
	NAPHTHALENE	J	0.51	10	MRL	ug/Kg	
	PHENANTHRENE	J	4.0	10	MRL	ug/Kg	
	PYRENE	J	7.4	10	MRL	ug/Kg	

LDC #: 29419Z4
SDG #: 280-36365-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/2/13
Page: 1 of 1
Reviewer: CR
2nd Reviewer: W

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/28/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (Al, Fe, Mn, Ti, ~~Ba~~ >4X ; Sb %S=101% (J/UJ))
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	~~N~~A	
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	—	1 + 2
XV	Field Blanks	SW	FB= EB1-112912 (280-36428-1) FB= FB-111412 (280-35930-1)

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

Validated Samples:

1	SL-507-SA6-SB-3.0-4.0~~MS~~	11		21		31	
2	SL-907-SA6-SB-3.0-4.0	12		22		32	
3	SL-522-SA6-SB-4.0-5.0	13		23		33	
4	SL-513-SA6-SB-4.0-5.0	14		24		34	
5	SL-511-SA6-SB-2.5-3.5	15		25		35	
6	SL-517-SA6-SB-2.0-3.0	16		26		36	
7	SL-517-SA6-SB-0.0-0.5	17		27		37	
8	SL-507-SA6-SB-3.0-4.0~~MS~~MS	18		28		38	
9	SL-507-SA6-SB-3.0-4.0~~MS~~MSD	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 29419Z4

VALIDATION FINDINGS WORKSHEET
Field Blanks

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

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/29/12 Soil factor applied 100x; Hg=83x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Blank ID		Sample Identification									
	EB1-112912 (SDG: 280-36428-1)	~~EB2 112912 (SDG: 280-36428-1)~~	Action Limit	1	3	4	5	6	7				
Ca		~~0.037~~	~~18.5~~										
Fe	0.88	~~0.87~~	440										
Mg	0.019		9.5										
Mn	0.0023	~~0.0016~~	1.15										
Na	0.19	~~0.10~~	95										
Zr	0.0036		1.8	1.8	1.4	1.4	1.7	0.87	1.5				

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 #: 29419Z4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/14/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification										
	FB-111412 (SDG:280-35930-1)	Action Limit	1	2	3	4	5	7				
B	0.024	12	1.5	1.5		1.0		1.2				
Na	0.17	85										
Ag	0.00078	0.39	0.056	0.051	0.032	0.030	0.029	0.031				

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-36365-1

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Nov-2012	TB-112812	280-36365-1	TB	METHOD	8015B GRO	III
28-Nov-2012	SL-506-SA6-SB-0.0-0.5-RS	280-36365-2	N	3550C	8015B EFH	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-4	N	3546	8270C SIM	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-4	N	3550C	8015B EFH	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-4MS	MS	3546	8270C SIM	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-4MS	MS	3550C	8015B EFH	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-4MSD	MSD	3546	8270C SIM	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-4MSD	MSD	3550C	8015B EFH	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	3050B	6010C	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	3050B	6020A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	3546	8082A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	7471B	7471B	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5MS	MS	3050B	6010C	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5MS	MS	3050B	6020A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5MS	MS	3546	8082A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5MS	MS	7471B	7471B	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5MSD	MSD	3050B	6010C	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5MSD	MSD	3050B	6020A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5MSD	MSD	3546	8082A	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5MSD	MSD	7471B	7471B	III
28-Nov-2012	SL-507-SA6-SB-3.5	280-36365-8	N	5035	8015B GRO	III
28-Nov-2012	SL-507-SA6-SB-3.5MS	280-36365-8MS	MS	5035	8015B GRO	III
28-Nov-2012	SL-507-SA6-SB-3.5MSD	280-36365-8MSD	MSD	5035	8015B GRO	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-6	FD	3546	8270C SIM	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-6	FD	3550C	8015B EFH	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	3050B	6010C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	3050B	6020A	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	3546	8082A	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	7471B	7471B	III
28-Nov-2012	SL-907-SA6-SB-3.5	280-36365-9	FD	5035	8015B GRO	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-10	N	3546	8270C SIM	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-10	N	3550C	8015B EFH	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	3050B	6010C	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	3050B	6020A	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	3546	8082A	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	7471B	7471B	III
28-Nov-2012	SL-522-SA6-SB-4.5	280-36365-12	N	5035	8015B GRO	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-16	N	3546	8270C SIM	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-16	N	3550C	8015B EFH	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	3050B	6010C	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	3050B	6020A	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	3546	8082A	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	7471B	7471B	III
28-Nov-2012	SL-511-SA6-SB-3.0	280-36365-18	N	5035	8015B GRO	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-13	N	3546	8270C SIM	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-13	N	3550C	8015B EFH	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	3050B	6010C	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	3050B	6020A	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	3546	8082A	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	7471B	7471B	III
28-Nov-2012	SL-513-SA6-SB-4.5	280-36365-15	N	5035	8015B GRO	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-22	N	3546	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
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-22	N	3550C	8015B EFH	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	3050B	6010C	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	3050B	6020A	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	3546	8082A	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	6860	6860	IV
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	7471B	7471B	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-19	N	3546	8270C SIM	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-19	N	3550C	8015B EFH	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	3050B	6010C	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	3050B	6020A	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	3546	8082A	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	6860	6860	IV
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	7471B	7471B	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0MS	280-36365-20MS	MS	6860	6860	IV
28-Nov-2012	SL-517-SA6-SB-2.0-3.0MSD	280-36365-20MSD	MSD	6860	6860	IV
28-Nov-2012	SL-517-SA6-SB-2.5	280-36365-21	N	5035	8015B GRO	III

III = EPA Level 3 Data Review *N = 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: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: GENCHEM

Method: 6860 **Matrix: SO**

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	0.35	J	0.040	MDL	5.5	MRL	ug/Kg	J	Z

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	1.5	J	0.95	MDL	9.4	MRL	mg/Kg	U	F
LITHIUM	23	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	270	J	0.097	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	2100	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	110	J	57	MDL	480	MRL	mg/Kg	J	Z
TIN	1.8	J	0.88	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.8	J	0.34	MDL	8.3	MRL	mg/Kg	U	F

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
LITHIUM	28	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	2000	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	100	J	61	MDL	520	MRL	mg/Kg	J	Z
TIN	1.9	J	0.94	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.7	J	0.36	MDL	8.9	MRL	mg/Kg	U	F

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.0	J	1.0	MDL	10	MRL	mg/Kg	U	F
LITHIUM	23	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	250	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	2500	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	360	J	61	MDL	520	MRL	mg/Kg	J	Z
TIN	1.8	J	0.94	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.37	MDL	8.9	MRL	mg/Kg	U	F

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.2	J	1.0	MDL	9.9	MRL	mg/Kg	U	F
LITHIUM	21	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	2500	J	42	MDL	6500	MRL	mg/Kg	J	Z
SODIUM	140	J	60	MDL	510	MRL	mg/Kg	J	Z
TIN	1.7	J	0.93	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.5	J	0.36	MDL	8.8	MRL	mg/Kg	U	F

Sample ID: SL-517-SA6-SB-2.0-3.0 *Collected:* 11/28/2012 2:25:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	8500	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
LITHIUM	25	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.098	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	40	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	130	J	58	MDL	490	MRL	mg/Kg	J	Z
TIN	1.8	J	0.89	MDL	11	MRL	mg/Kg	J	Z
Zirconium	0.87	J	0.35	MDL	8.4	MRL	mg/Kg	U	F

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
LITHIUM	20	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	200	J	0.098	MDL	490	MRL	mg/Kg	J	Z
POTASSIUM	1400	J	40	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	100	J	58	MDL	490	MRL	mg/Kg	J	Z
TIN	1.7	J	0.90	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.35	MDL	8.5	MRL	mg/Kg	U	F

Sample ID: SL-907-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	1.5	J	0.90	MDL	8.9	MRL	mg/Kg	U	F
LITHIUM	23	J	0.27	MDL	34	MRL	mg/Kg	J	Z
MANGANESE	290	J	0.092	MDL	450	MRL	mg/Kg	J	Z
POTASSIUM	2200	J	38	MDL	5900	MRL	mg/Kg	J	Z
SODIUM	120	J	54	MDL	460	MRL	mg/Kg	J	Z
TIN	1.8	J	0.83	MDL	10	MRL	mg/Kg	J	Z
Zirconium	1.9	J	0.32	MDL	7.9	MRL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.015	J	0.014	MDL	9.0	MRL	mg/Kg	J	Z, Q
ARSENIC	9.8	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	100	J	0.073	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.75	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.17	J	0.0097	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.078	MDL	38	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.1	J	0.0068	MDL	22	MRL	mg/Kg	J	Z
COPPER	6.0	J	0.073	MDL	30	MRL	mg/Kg	J	Z
LEAD	5.1	J B	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.018	MDL	5.5	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.026	MDL	30	MRL	mg/Kg	J	Z
SILVER	0.056	J	0.021	MDL	0.82	MRL	mg/Kg	U	F
THALLIUM	0.25	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	34	J	0.040	MDL	64	MRL	mg/Kg	J	Z
ZINC	46	J	0.33	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.8	MRL	mg/Kg	UJ	Q
ARSENIC	4.5	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	67	J	0.071	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.62	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0095	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.077	MDL	37	MRL	mg/Kg	J	Z
COBALT	5.3	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	6.3	J	0.072	MDL	29	MRL	mg/Kg	J	Z
LEAD	5.2	J B	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.30	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	9.5	J B	0.026	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.029	J	0.021	MDL	0.80	MRL	mg/Kg	U	F
THALLIUM	0.22	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	39	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	46	J	0.32	MDL	110	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	J	0.014	MDL	8.6	MRL	mg/Kg	J	Z, Q
ARSENIC	3.8	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	71	J	0.070	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.51	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.15	J	0.0093	MDL	0.99	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.075	MDL	37	MRL	mg/Kg	J	Z
COBALT	5.4	J	0.0066	MDL	21	MRL	mg/Kg	J	Z
COPPER	7.7	J	0.071	MDL	29	MRL	mg/Kg	J	Z
LEAD	6.3	J B	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.46	J	0.017	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	10	J B	0.025	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.030	J	0.020	MDL	0.78	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	32	J	0.038	MDL	62	MRL	mg/Kg	J	Z
ZINC	52	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	J	0.013	MDL	8.2	MRL	mg/Kg	J	Z, Q
ARSENIC	3.7	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	76	J	0.066	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.48	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.19	J	0.0088	MDL	0.94	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.071	MDL	35	MRL	mg/Kg	J	Z
COBALT	5.5	J	0.0062	MDL	20	MRL	mg/Kg	J	Z
COPPER	8.8	J	0.067	MDL	27	MRL	mg/Kg	J	Z
LEAD	4.9	J B	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.27	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	9.8	J B	0.024	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.031	J	0.019	MDL	0.74	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	32	J	0.036	MDL	58	MRL	mg/Kg	J	Z
ZINC	57	J	0.30	MDL	100	MRL	mg/Kg	J	Z

Sample ID: SL-517-SA6-SB-2.0-3.0 *Collected:* 11/28/2012 2:25:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.6	MRL	mg/Kg	UJ	Q
ARSENIC	3.8	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	63	J	0.070	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.42	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.11	J	0.0093	MDL	0.99	MRL	mg/Kg	J	Z
CHROMIUM	11	J	0.075	MDL	36	MRL	mg/Kg	J	Z
COBALT	4.3	J	0.0065	MDL	21	MRL	mg/Kg	J	Z
COPPER	4.6	J	0.070	MDL	29	MRL	mg/Kg	J	Z
LEAD	3.2	J B	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.20	J	0.017	MDL	5.2	MRL	mg/Kg	J	Z
NICKEL	7.1	J B	0.025	MDL	29	MRL	mg/Kg	J	Z
THALLIUM	0.24	J	0.0035	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	22	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	51	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.013	U	0.013	MDL	8.2	MRL	mg/Kg	UJ	Q
BARIUM	68	J	0.066	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.66	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.086	J	0.0088	MDL	0.94	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.071	MDL	35	MRL	mg/Kg	J	Z
COBALT	4.8	J	0.0062	MDL	20	MRL	mg/Kg	J	Z
COPPER	4.5	J	0.067	MDL	27	MRL	mg/Kg	J	Z
LEAD	4.7	J B	0.017	MDL	32	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.39	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	8.7	J B	0.024	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.032	J	0.019	MDL	0.74	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z
VANADIUM	31	J	0.036	MDL	58	MRL	mg/Kg	J	Z
ZINC	40	J	0.30	MDL	100	MRL	mg/Kg	J	Z

Sample ID: SL-907-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.013	J	0.013	MDL	8.0	MRL	mg/Kg	J	Z, Q
ARSENIC	9.8	J	0.047	MDL	14	MRL	mg/Kg	J	Z
BARIUM	98	J	0.065	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.69	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.17	J	0.0087	MDL	0.92	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.070	MDL	34	MRL	mg/Kg	J	Z
COBALT	6.1	J	0.0061	MDL	19	MRL	mg/Kg	J	Z
COPPER	6.0	J	0.066	MDL	27	MRL	mg/Kg	J	Z
LEAD	5.0	J B	0.017	MDL	31	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.016	MDL	4.9	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.023	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.051	J	0.019	MDL	0.73	MRL	mg/Kg	U	F
THALLIUM	0.24	J	0.0032	MDL	0.42	MRL	mg/Kg	J	Z
VANADIUM	33	J	0.036	MDL	57	MRL	mg/Kg	J	Z
ZINC	45	J	0.29	MDL	100	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.017	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.015	J	0.0062	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.014	J	0.0061	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.021	J	0.0066	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0096	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-907-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:20:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.016	J	0.0060	MDL	0.022	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-506-SA6-SB-0.0-0.5-RS *Collected:* 11/28/2012 8:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	1.5	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z
EFH(C21-C30)	2.8	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 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
EFH(C21-C30)	3.2	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z
EFH(C30-C40)	3.7	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	3.0	J	1.0	MDL	5.1	MRL	mg/Kg	J	Z
EFH(C30-C40)	4.7	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	1.3	J	0.98	MDL	4.9	MRL	mg/Kg	J	Z
EFH(C30-C40)	1.8	J	0.98	MDL	9.8	MRL	mg/Kg	J	Z
TOTAL EFH(C8-C40)	3.7	J B	0.66	MDL	3.9	MRL	mg/Kg	U	B

Sample ID: SL-517-SA6-SB-2.0-3.0 *Collected:* 11/28/2012 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	0.84	J B	0.69	MDL	4.1	MRL	mg/Kg	U	B

Sample ID: SL-522-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	1.2	J B	0.70	MDL	4.1	MRL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-907-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 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
EFH(C21-C30)	2.4	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z
EFH(C30-C40)	3.7	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-517-SA6-SB-0.0-0.5 *Collected:* 11/28/2012 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.33	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.44	J	0.32	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHENE	0.96	J	0.17	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.21	J	0.18	MDL	10	MRL	ug/Kg	J	Z
ANTHRACENE	0.81	J	0.75	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	5.6	J	0.94	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	5.9	J	0.78	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	9.0	J	1.3	MDL	10	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	2.5	J	1.0	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	9.0	J	1.0	MDL	10	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.6	J	1.4	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	8.7	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	0.57	J	0.49	MDL	10	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	5.3	J	1.2	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	0.51	J	0.34	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	4.0	J	1.2	MDL	10	MRL	ug/Kg	J	Z
PYRENE	7.4	J	1.2	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: VOA

Method: 8015B GRO **Matrix:** SO

Sample ID: SL-507-SA6-SB-3.5 **Collected:** 11/28/2012 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C4-C12)	0.51	J	0.31	MDL	0.96	MRL	mg/Kg	J	Z, FD

Sample ID: SL-907-SA6-SB-3.5 **Collected:** 11/28/2012 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
GASOLINE RANGE ORGANICS (C4-C12)	0.30	U	0.30	MDL	0.91	MRL	mg/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36365-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149925/1-A	12/3/2012 10:17:00 PM	LEAD NICKEL	0.0181 mg/Kg 0.0257 mg/Kg	SL-507-SA6-SB-3.0-4.0 SL-511-SA6-SB-2.5-3.5 SL-513-SA6-SB-4.0-5.0 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-522-SA6-SB-4.0-5.0 SL-907-SA6-SB-3.0-4.0

Method: 8015B EFH
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-149937/1-A	12/7/2012 12:18:00 AM	TOTAL EFH(C8-C40)	1.02 mg/Kg	SL-506-SA6-SB-0.0-0.5-RS SL-507-SA6-SB-3.0-4.0 SL-511-SA6-SB-2.5-3.5 SL-513-SA6-SB-4.0-5.0 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-522-SA6-SB-4.0-5.0 SL-907-SA6-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-513-SA6-SB-4.0-5.0(RES)	TOTAL EFH(C8-C40)	3.7 mg/Kg	3.9U mg/Kg
SL-517-SA6-SB-2.0-3.0(RES)	TOTAL EFH(C8-C40)	0.84 mg/Kg	4.1U mg/Kg
SL-522-SA6-SB-4.0-5.0(RES)	TOTAL EFH(C8-C40)	1.2 mg/Kg	4.1U mg/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB1-112912(RE2/TOT)	11/29/2012 3:00:00 PM	SODIUM Zirconium	0.19 mg/L 0.0036 mg/L	SL-507-SA6-SB-3.0-4.0 SL-507-SA6-SB-3.5 SL-511-SA6-SB-2.5-3.5 SL-511-SA6-SB-3.0 SL-513-SA6-SB-4.0-5.0 SL-513-SA6-SB-4.5 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-2.5 SL-522-SA6-SB-4.0-5.0 SL-522-SA6-SB-4.5 SL-907-SA6-SB-3.0-4.0 SL-907-SA6-SB-3.5
EB1-112912(RES/TOT)	11/29/2012 3:00:00 PM	IRON MAGNESIUM MANGANESE	0.88 mg/L 0.019 mg/L 0.0023 mg/L	SL-507-SA6-SB-3.0-4.0 SL-507-SA6-SB-3.5 SL-511-SA6-SB-2.5-3.5 SL-511-SA6-SB-3.0 SL-513-SA6-SB-4.0-5.0 SL-513-SA6-SB-4.5 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-2.5 SL-522-SA6-SB-4.0-5.0 SL-522-SA6-SB-4.5 SL-907-SA6-SB-3.0-4.0 SL-907-SA6-SB-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-507-SA6-SB-3.0-4.0(RES/TOT)	Zirconium	1.8 mg/Kg	1.8U mg/Kg
SL-511-SA6-SB-2.5-3.5(RES/TOT)	Zirconium	1.7 mg/Kg	1.7U mg/Kg
SL-513-SA6-SB-4.0-5.0(RES/TOT)	Zirconium	1.4 mg/Kg	1.4U mg/Kg
SL-517-SA6-SB-0.0-0.5(RES/TOT)	Zirconium	1.5 mg/Kg	1.5U mg/Kg
SL-517-SA6-SB-2.0-3.0(RES/TOT)	Zirconium	0.87 mg/Kg	0.87U mg/Kg
SL-522-SA6-SB-4.0-5.0(RES/TOT)	Zirconium	1.4 mg/Kg	1.4U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	BORON SODIUM	0.024 mg/L 0.17 mg/L	SL-506-SA6-SB-0.0-0.5-RS SL-507-SA6-SB-3.0-4.0 SL-507-SA6-SB-3.5 SL-511-SA6-SB-2.5-3.5 SL-511-SA6-SB-3.0 SL-513-SA6-SB-4.0-5.0 SL-513-SA6-SB-4.5 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-2.5 SL-522-SA6-SB-4.0-5.0 SL-522-SA6-SB-4.5 SL-907-SA6-SB-3.0-4.0 SL-907-SA6-SB-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-507-SA6-SB-3.0-4.0(RES/TOT)	BORON	1.5 mg/Kg	1.5U mg/Kg
SL-513-SA6-SB-4.0-5.0(RES/TOT)	BORON	1.0 mg/Kg	1.0U mg/Kg
SL-517-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.2 mg/Kg	1.2U mg/Kg
SL-907-SA6-SB-3.0-4.0(RES/TOT)	BORON	1.5 mg/Kg	1.5U mg/Kg

Method: 6020A
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	SILVER	0.00078 mg/L	SL-506-SA6-SB-0.0-0.5-RS SL-507-SA6-SB-3.0-4.0 SL-507-SA6-SB-3.5 SL-511-SA6-SB-2.5-3.5 SL-511-SA6-SB-3.0 SL-513-SA6-SB-4.0-5.0 SL-513-SA6-SB-4.5 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-2.5 SL-522-SA6-SB-4.0-5.0 SL-522-SA6-SB-4.5 SL-907-SA6-SB-3.0-4.0 SL-907-SA6-SB-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-507-SA6-SB-3.0-4.0(RES/TOT)	SILVER	0.056 mg/Kg	0.056U mg/Kg
SL-511-SA6-SB-2.5-3.5(RES/TOT)	SILVER	0.029 mg/Kg	0.029U mg/Kg
SL-513-SA6-SB-4.0-5.0(RES/TOT)	SILVER	0.030 mg/Kg	0.030U mg/Kg
SL-517-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.031 mg/Kg	0.031U mg/Kg
SL-522-SA6-SB-4.0-5.0(RES/TOT)	SILVER	0.032 mg/Kg	0.032U mg/Kg
SL-907-SA6-SB-3.0-4.0(RES/TOT)	SILVER	0.051 mg/Kg	0.051U mg/Kg

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36365-1

Laboratory: TA DEN

EDD Filename: 280-36365-1

eQAPP Name: CDM_SSFL_120907_TA

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-507-SA6-SB-3.0-4.0MS (TOT) SL-507-SA6-SB-3.0-4.0MSD (TOT) (SL-507-SA6-SB-3.0-4.0 SL -511-SA6-SB-2.5-3.5 SL -513-SA6-SB-4.0-5.0 SL -517-SA6-SB-0.0-0.5 SL -517-SA6-SB-2.0-3.0 SL -522-SA6-SB-4.0-5.0 SL -907-SA6-SB-3.0-4.0)	ANTIMONY	5	4	75.00-125.00	-	ANTIMONY	J (all detects) UJ (all non-detects) Post Spike = 101%

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-507-SA6-SB-3.0-4.0MS (TOT) SL-507-SA6-SB-3.0-4.0MSD (TOT) (SL-507-SA6-SB-3.0-4.0 SL -511-SA6-SB-2.5-3.5 SL -513-SA6-SB-4.0-5.0 SL -517-SA6-SB-0.0-0.5 SL -517-SA6-SB-2.0-3.0 SL -522-SA6-SB-4.0-5.0 SL -907-SA6-SB-3.0-4.0)	ALUMINUM IRON MANGANESE TITANIUM	2930 1905 128 250	2599 1278 - 193	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM IRON MANGANESE TITANIUM	No Qual, >4x

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Analyte	Concentration (mg/Kg) SL-507-SA6-SB-3.0-4.0 (TOT)	Concentration (mg/Kg) SL-907-SA6-SB-3.0-4.0 (TOT)	Sample RPD	eQAPP RPD	Flag
ALUMINUM	16000	16000	0	50.00	No Qualifiers Applied
BORON	1.5	1.5	0	50.00	
CALCIUM	2100	2100	0	50.00	
IRON	19000	18000	5	50.00	
LITHIUM	23	23	0	50.00	
MAGNESIUM	4000	3900	3	50.00	
MANGANESE	270	290	7	50.00	
PHOSPHORUS	210	210	0	50.00	
POTASSIUM	2100	2200	5	50.00	
SODIUM	110	120	9	50.00	
STRONTIUM	19	19	0	50.00	
TIN	1.8	1.8	0	50.00	
TITANIUM	860	840	2	50.00	
Zirconium	1.8	1.9	5	50.00	

Method: 6020A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-507-SA6-SB-3.0-4.0 (TOT)	Concentration (mg/Kg) SL-907-SA6-SB-3.0-4.0 (TOT)	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.015	0.013	14	50.00	No Qualifiers Applied
ARSENIC	9.8	9.8	0	50.00	
BARIUM	100	98	2	50.00	
BERYLLIUM	0.75	0.69	8	50.00	
CADMIUM	0.17	0.17	0	50.00	
CHROMIUM	16	15	6	50.00	
COBALT	6.1	6.1	0	50.00	
COPPER	6.0	6.0	0	50.00	
LEAD	5.1	5.0	2	50.00	
MOLYBDENUM	0.42	0.42	0	50.00	
NICKEL	11	11	0	50.00	
SELENIUM	0.91	0.81	12	50.00	
SILVER	0.056	0.051	9	50.00	
THALLIUM	0.25	0.24	4	50.00	
VANADIUM	34	33	3	50.00	
ZINC	46	45	2	50.00	

Method: 7471B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-507-SA6-SB-3.0-4.0 (TOT)	Concentration (mg/Kg) SL-907-SA6-SB-3.0-4.0 (TOT)	Sample RPD	eQAPP RPD	Flag
MERCURY	0.017	0.016	6	50.00	No Qualifiers Applied

Method: 8015B EFH
Matrix: SO

Analyte	Concentration (mg/Kg) SL-507-SA6-SB-3.0-4.0	Concentration (mg/Kg) SL-907-SA6-SB-3.0-4.0	Sample RPD	eQAPP RPD	Flag
EFH(C21-C30)	3.2	2.4	29	50.00	No Qualifiers Applied
EFH(C30-C40)	3.7	3.7	0	50.00	
TOTAL EFH(C8-C40)	7.8	6.8	14	50.00	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B GRO
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-507-SA6-SB-3.5	SL-907-SA6-SB-3.5			
GASOLINE RANGE ORGANICS (C4-C12)	0.51	0.91 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045D
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-507-SA6-SB-3.0-4.0	SL-907-SA6-SB-3.0-4.0			
PH	7.40	7.88	6		No Qualifiers Applied
TEMPERATURE	20.9	20.8	0		

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA6-SB-3.0-4.0	ALUMINUM	J	16000	19000	MRL	mg/Kg	J (all detects)
	BORON	J	1.5	9.4	MRL	mg/Kg	
	LITHIUM	J	23	36	MRL	mg/Kg	
	MANGANESE	J	270	480	MRL	mg/Kg	
	POTASSIUM	J	2100	6200	MRL	mg/Kg	
	SODIUM	J	110	480	MRL	mg/Kg	
	TIN	J	1.8	11	MRL	mg/Kg	
	Zirconium	J	1.8	8.3	MRL	mg/Kg	
SL-511-SA6-SB-2.5-3.5	ALUMINUM	J	16000	21000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	28	38	MRL	mg/Kg	
	MANGANESE	J	240	510	MRL	mg/Kg	
	POTASSIUM	J	2000	6600	MRL	mg/Kg	
	SODIUM	J	100	520	MRL	mg/Kg	
	TIN	J	1.9	11	MRL	mg/Kg	
	Zirconium	J	1.7	8.9	MRL	mg/Kg	
SL-513-SA6-SB-4.0-5.0	ALUMINUM	J	12000	21000	MRL	mg/Kg	J (all detects)
	BORON	J	1.0	10	MRL	mg/Kg	
	LITHIUM	J	23	38	MRL	mg/Kg	
	MANGANESE	J	250	510	MRL	mg/Kg	
	POTASSIUM	J	2500	6600	MRL	mg/Kg	
	SODIUM	J	360	520	MRL	mg/Kg	
	TIN	J	1.8	11	MRL	mg/Kg	
	Zirconium	J	1.4	8.9	MRL	mg/Kg	
SL-517-SA6-SB-0.0-0.5	ALUMINUM	J	12000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	1.2	9.9	MRL	mg/Kg	
	LITHIUM	J	21	38	MRL	mg/Kg	
	MANGANESE	J	240	510	MRL	mg/Kg	
	POTASSIUM	J	2500	6500	MRL	mg/Kg	
	SODIUM	J	140	510	MRL	mg/Kg	
	TIN	J	1.7	11	MRL	mg/Kg	
	Zirconium	J	1.5	8.8	MRL	mg/Kg	
SL-517-SA6-SB-2.0-3.0	ALUMINUM	J	8500	20000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	25	36	MRL	mg/Kg	
	MANGANESE	J	240	480	MRL	mg/Kg	
	POTASSIUM	J	2700	6300	MRL	mg/Kg	
	SODIUM	J	130	490	MRL	mg/Kg	
	TIN	J	1.8	11	MRL	mg/Kg	
	Zirconium	J	0.87	8.4	MRL	mg/Kg	
SL-522-SA6-SB-4.0-5.0	ALUMINUM	J	15000	20000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	20	36	MRL	mg/Kg	
	MANGANESE	J	200	490	MRL	mg/Kg	
	POTASSIUM	J	1400	6300	MRL	mg/Kg	
	SODIUM	J	100	490	MRL	mg/Kg	
	TIN	J	1.7	11	MRL	mg/Kg	
	Zirconium	J	1.4	8.5	MRL	mg/Kg	
SL-907-SA6-SB-3.0-4.0	ALUMINUM	J	16000	18000	MRL	mg/Kg	J (all detects)
	BORON	J	1.5	8.9	MRL	mg/Kg	
	LITHIUM	J	23	34	MRL	mg/Kg	
	MANGANESE	J	290	450	MRL	mg/Kg	
	POTASSIUM	J	2200	5900	MRL	mg/Kg	
	SODIUM	J	120	460	MRL	mg/Kg	
	TIN	J	1.8	10	MRL	mg/Kg	
	Zirconium	J	1.9	7.9	MRL	mg/Kg	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA6-SB-3.0-4.0	ANTIMONY	J	0.015	9.0	MRL	mg/Kg	
	ARSENIC	J	9.8	15	MRL	mg/Kg	
	BARIUM	J	100	140	MRL	mg/Kg	
	BERYLLIUM	J	0.75	1.1	MRL	mg/Kg	
	CADMIUM	J	0.17	1.0	MRL	mg/Kg	
	CHROMIUM	J	16	38	MRL	mg/Kg	
	COBALT	J	6.1	22	MRL	mg/Kg	
	COPPER	J	6.0	30	MRL	mg/Kg	J (all detects)
	LEAD	J B	5.1	35	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	5.5	MRL	mg/Kg	
	NICKEL	J B	11	30	MRL	mg/Kg	
	SILVER	J	0.056	0.82	MRL	mg/Kg	
	THALLIUM	J	0.25	0.47	MRL	mg/Kg	
	VANADIUM	J	34	64	MRL	mg/Kg	
	ZINC	J	46	110	MRL	mg/Kg	
SL-511-SA6-SB-2.5-3.5	ARSENIC	J	4.5	15	MRL	mg/Kg	
	BARIUM	J	67	140	MRL	mg/Kg	
	BERYLLIUM	J	0.62	1.1	MRL	mg/Kg	
	CADMIUM	J	0.13	1.0	MRL	mg/Kg	
	CHROMIUM	J	16	37	MRL	mg/Kg	
	COBALT	J	5.3	21	MRL	mg/Kg	
	COPPER	J	6.3	29	MRL	mg/Kg	
	LEAD	J B	5.2	34	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.30	5.4	MRL	mg/Kg	
	NICKEL	J B	9.5	29	MRL	mg/Kg	
	SILVER	J	0.029	0.80	MRL	mg/Kg	
	THALLIUM	J	0.22	0.46	MRL	mg/Kg	
	VANADIUM	J	39	63	MRL	mg/Kg	
	ZINC	J	46	110	MRL	mg/Kg	
SL-513-SA6-SB-4.0-5.0	ANTIMONY	J	0.014	8.6	MRL	mg/Kg	
	ARSENIC	J	3.8	15	MRL	mg/Kg	
	BARIUM	J	71	140	MRL	mg/Kg	
	BERYLLIUM	J	0.51	1.1	MRL	mg/Kg	
	CADMIUM	J	0.15	0.99	MRL	mg/Kg	
	CHROMIUM	J	16	37	MRL	mg/Kg	
	COBALT	J	5.4	21	MRL	mg/Kg	
	COPPER	J	7.7	29	MRL	mg/Kg	J (all detects)
	LEAD	J B	6.3	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.46	5.3	MRL	mg/Kg	
	NICKEL	J B	10	29	MRL	mg/Kg	
	SILVER	J	0.030	0.78	MRL	mg/Kg	
	THALLIUM	J	0.23	0.46	MRL	mg/Kg	
	VANADIUM	J	32	62	MRL	mg/Kg	
	ZINC	J	52	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-SA6-SB-0.0-0.5	ANTIMONY	J	0.014	8.2	MRL	mg/Kg	
	ARSENIC	J	3.7	14	MRL	mg/Kg	
	BARIUM	J	76	130	MRL	mg/Kg	
	BERYLLIUM	J	0.48	1.0	MRL	mg/Kg	
	CADMIUM	J	0.19	0.94	MRL	mg/Kg	
	CHROMIUM	J	16	35	MRL	mg/Kg	
	COBALT	J	5.5	20	MRL	mg/Kg	
	COPPER	J	8.8	27	MRL	mg/Kg	J (all detects)
	LEAD	J B	4.9	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.27	5.0	MRL	mg/Kg	
	NICKEL	J B	9.8	27	MRL	mg/Kg	
	SILVER	J	0.031	0.74	MRL	mg/Kg	
	THALLIUM	J	0.23	0.43	MRL	mg/Kg	
	VANADIUM	J	32	58	MRL	mg/Kg	
	ZINC	J	57	100	MRL	mg/Kg	
SL-517-SA6-SB-2.0-3.0	ARSENIC	J	3.8	15	MRL	mg/Kg	
	BARIUM	J	63	140	MRL	mg/Kg	
	BERYLLIUM	J	0.42	1.1	MRL	mg/Kg	
	CADMIUM	J	0.11	0.99	MRL	mg/Kg	
	CHROMIUM	J	11	36	MRL	mg/Kg	
	COBALT	J	4.3	21	MRL	mg/Kg	
	COPPER	J	4.6	29	MRL	mg/Kg	J (all detects)
	LEAD	J B	3.2	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.20	5.2	MRL	mg/Kg	
	NICKEL	J B	7.1	29	MRL	mg/Kg	
	THALLIUM	J	0.24	0.45	MRL	mg/Kg	
	VANADIUM	J	22	61	MRL	mg/Kg	
	ZINC	J	51	110	MRL	mg/Kg	
SL-522-SA6-SB-4.0-5.0	BARIUM	J	68	130	MRL	mg/Kg	
	BERYLLIUM	J	0.66	1.0	MRL	mg/Kg	
	CADMIUM	J	0.086	0.94	MRL	mg/Kg	
	CHROMIUM	J	15	35	MRL	mg/Kg	
	COBALT	J	4.8	20	MRL	mg/Kg	
	COPPER	J	4.5	27	MRL	mg/Kg	
	LEAD	J B	4.7	32	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.39	5.0	MRL	mg/Kg	
	NICKEL	J B	8.7	27	MRL	mg/Kg	
	SILVER	J	0.032	0.74	MRL	mg/Kg	
	THALLIUM	J	0.23	0.43	MRL	mg/Kg	
	VANADIUM	J	31	58	MRL	mg/Kg	
	ZINC	J	40	100	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-907-SA6-SB-3.0-4.0	ANTIMONY	J	0.013	8.0	MRL	mg/Kg	
	ARSENIC	J	9.8	14	MRL	mg/Kg	
	BARIUM	J	98	130	MRL	mg/Kg	
	BERYLLIUM	J	0.69	1.0	MRL	mg/Kg	
	CADMIUM	J	0.17	0.92	MRL	mg/Kg	
	CHROMIUM	J	15	34	MRL	mg/Kg	
	COBALT	J	6.1	19	MRL	mg/Kg	
	COPPER	J	6.0	27	MRL	mg/Kg	J (all detects)
	LEAD	J B	5.0	31	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	4.9	MRL	mg/Kg	
	NICKEL	J B	11	27	MRL	mg/Kg	
	SILVER	J	0.051	0.73	MRL	mg/Kg	
	THALLIUM	J	0.24	0.42	MRL	mg/Kg	
	VANADIUM	J	33	57	MRL	mg/Kg	
	ZINC	J	45	100	MRL	mg/Kg	

Method: 6860
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-SA6-SB-0.0-0.5	PERCHLORATE	J	0.35	5.5	MRL	ug/Kg	J (all detects)

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA6-SB-3.0-4.0	MERCURY	J	0.017	0.023	MRL	mg/Kg	J (all detects)
SL-511-SA6-SB-2.5-3.5	MERCURY	J	0.015	0.022	MRL	mg/Kg	J (all detects)
SL-513-SA6-SB-4.0-5.0	MERCURY	J	0.014	0.022	MRL	mg/Kg	J (all detects)
SL-517-SA6-SB-0.0-0.5	MERCURY	J	0.021	0.024	MRL	mg/Kg	J (all detects)
SL-522-SA6-SB-4.0-5.0	MERCURY	J	0.0096	0.023	MRL	mg/Kg	J (all detects)
SL-907-SA6-SB-3.0-4.0	MERCURY	J	0.016	0.022	MRL	mg/Kg	J (all detects)

Method: 8015B EFH
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-506-SA6-SB-0.0-0.5-RS	EFH(C15-C20)	J	1.5	5.4	MRL	mg/Kg	J (all detects)
	EFH(C21-C30)	J	2.8	5.4	MRL	mg/Kg	
SL-507-SA6-SB-3.0-4.0	EFH(C21-C30)	J	3.2	5.2	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	3.7	10	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-1 **Laboratory: TA DEN**

EDD Filename: 280-36365-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA6-SB-2.5-3.5	EFH(C21-C30)	J	3.0	5.1	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	4.7	10	MRL	mg/Kg	
SL-513-SA6-SB-4.0-5.0	EFH(C21-C30)	J	1.3	4.9	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	1.8	9.8	MRL	mg/Kg	
	TOTAL EFH(C8-C40)	J B	3.7	3.9	MRL	mg/Kg	
SL-517-SA6-SB-2.0-3.0	TOTAL EFH(C8-C40)	J B	0.84	4.1	MRL	mg/Kg	J (all detects)
SL-522-SA6-SB-4.0-5.0	TOTAL EFH(C8-C40)	J B	1.2	4.1	MRL	mg/Kg	J (all detects)
SL-907-SA6-SB-3.0-4.0	EFH(C21-C30)	J	2.4	5.2	MRL	mg/Kg	J (all detects)
	EFH(C30-C40)	J	3.7	10	MRL	mg/Kg	

Method: 8015B GRO

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA6-SB-3.5	GASOLINE RANGE ORGANICS (C4-C12)	J	0.51	0.96	MRL	mg/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.33	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.44	10	MRL	ug/Kg	
	ACENAPHTHENE	J	0.96	10	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.21	10	MRL	ug/Kg	
	ANTHRACENE	J	0.81	10	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	5.6	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	5.9	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	9.0	10	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	2.5	10	MRL	ug/Kg	
	CHRYSENE	J	9.0	10	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.6	10	MRL	ug/Kg	
	FLUORANTHENE	J	8.7	10	MRL	ug/Kg	
	FLUORENE	J	0.57	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	5.3	10	MRL	ug/Kg	
	NAPHTHALENE	J	0.51	10	MRL	ug/Kg	
	PHENANTHRENE	J	4.0	10	MRL	ug/Kg	
	PYRENE	J	7.4	10	MRL	ug/Kg	

LDC #: 29419Z4
SDG #: 280-36365-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 9/2/13
Page: 1 of 1
Reviewer: CR
2nd Reviewer: W

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/28/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (Al, Fe, Mn, Ti, ~~Ba~~ >4X ; Sb %R=101% (J/UJ))
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	~~NA~~ A	
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	—	1 + 2
XV	Field Blanks	SW	FB = EB1-112912 (280-36428-1) FB = FB-111412 (280-35930-1)

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

Validated Samples:

1	SL-507-SA6-SB-3.0-4.0~~MS~~	11		21		31	
2	SL-907-SA6-SB-3.0-4.0	12		22		32	
3	SL-522-SA6-SB-4.0-5.0	13		23		33	
4	SL-513-SA6-SB-4.0-5.0	14		24		34	
5	SL-511-SA6-SB-2.5-3.5	15		25		35	
6	SL-517-SA6-SB-2.0-3.0	16		26		36	
7	SL-517-SA6-SB-0.0-0.5	17		27		37	
8	SL-507-SA6-SB-3.0-4.0~~MS~~MS	18		28		38	
9	SL-507-SA6-SB-3.0-4.0~~MS~~MSD	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 29419Z4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: 02
2nd Reviewer: W

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/29/12 Soil factor applied 100x; Hg=83x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Blank ID		Sample Identification									
	EB1-112912 (SDG: 280-36428-1)	~~EB2-112912 (SDG: 280-36428-1)~~	Action Limit	1	3	4	5	6	7				
Ca		~~0.037~~	~~18.5~~										
Fe	0.88	~~0.07~~	440										
Mg	0.019		9.5										
Mn	0.0023	~~0.0016~~	1.15										
Na	0.19	~~0.10~~	95										
Zr	0.0036		1.8	1.8	1.4	1.4	1.7	0.87	1.5				

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 #: 29419Z4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SM
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/14/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification										
	FB-111412 (SDG:280-35930-1)	Action Limit	1	2	3	4	5	7				
B	0.024	12	1.5	1.5		1.0		1.2				
Na	0.17	85										
Ag	0.00078	0.39	0.056	0.051	0.032	0.030	0.029	0.031				

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".

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: November 28, 2012

LDC Report Date: April 30, 2013

Matrix: Soil

Parameters: Perchlorate

Validation Level: Level IV

Laboratory: TestAmerica, Inc.

Sample Delivery Group (SDG): 280-36365-1

Sample Identification

SL-517-SA6-SB-2.0-3.0
SL-517-SA6-SB-0.0-0.5
SL-517-SA6-SB-2.0-3.0MS
SL-517-SA6-SB-2.0-3.0MSD

Introduction

This data review covers 4 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6860 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.

Sample EB1-112912 (from SDG 280-36428-1) was identified as an equipment blank. No perchlorate was found.

Sample FB-111412 (from SDG 280-35930-1) was identified as a field blank. No perchlorate was found.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

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

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation

All compound quantitations were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 280-36365-1	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 280-36365-1

SDG	Sample	Compound	Flag	A or P	Reason (Code)
280-36365-1	SL-517-SA6-SB-2.0-3.0 SL-517-SA6-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG 280-36365-1

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG 280-36365-1

No Sample Data Qualified in this SDG

LDC #: 29419Z87 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/13

SDG #: 280-36365-1 Level IV Page: 1 of 1

Laboratory: Test America, Inc. Reviewer: JVG

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: 11/28/12
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r ✓
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 15 %/50 % LODV ≤ 50 %
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/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	A/D	FB = FB-111412 (280-35930-1) EB= EB1-112912 (280-36428-1)

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

✓

Validated Samples: Soil

1	SL-517-SA6-SB-2.0-3.0	11	MB 280-150186/1-A	21		31	
2	SL-517-SA6-SB-0.0-0.5	12		22		32	
3	SL-517-SA6-SB-2.0-3.0MS	13		23		33	
4	SL-517-SA6-SB-2.0-3.0MSD	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 #: 29419 287

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: _____

Method: _____ GC ✓ LC/MS

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. LC/MS Instrument performance check				
Were the instrument performance 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) ≤ 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) ≤ 15%?	✓			
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. 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?	✓			
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
XIII. 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
IX. 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?	✓			
XI. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	
Target compounds were detected in the field blanks.			✓	

LDC#: 29419287

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

Method: LCMS Perchlorate (EPASW 846 Method 6860)

Calibration Date	System	Compound	Standard	(Y) Area ratio	(X) Conc ratio
11/27/2012	LCMS1	Perchlorate	1	0.12352	0.10
			2	0.30877	0.25
			3	0.61229	0.50
			4	1.18530	1.00
			5	2.97193	2.50
			6	5.73026	5.00

Regression Output		*Calculated*	*Reported*
Constant	*b* =	*0.036514*	*2.9055*
R Squared	*r2* =	*0.999693*	*1.000000*
X Coefficient(s)	*m* =	*1.145773*	*1.1599*
Correlation Coefficient		*0.999847*	
Coefficient of Determination (r^2)		*0.999693*	*1.000000*

LDC # 29419 287

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: _____

Method: LCMS Perchlorate (EPASW 846 Method 6860)

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

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	CCV 280-151044/12	12/7/2012	Perchlorate	0.200	0.186	0.186	6.8	6.8

LDC #: 29419 Z87

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: _____

METHOD: LC/MS Perchlorate (EPA SW 846 Method 6850/6860)

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 MS - MSD I * 2/(MS + MSD) MS = Matrix spike percent recovery MSD = Matrix spike duplicate percent recovery

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
Perchlorate	2.05	1.90	0	1.85	1.69	90	90	89	89	9	9

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

LDC #: 29419 Z87

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: _____

METHOD: LC/MS Perchlorate (EPA SW 846 Method 6850/6860)

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

LCS/LCSD samples: LCS 280-150186/2-A

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	Recalc
Perchlorate	1.87	NA	1.60	NA	88	88				

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 #: 29419 Z87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: _____

METHOD: LCMS Perchlorate (EPA SW 846 Method 6850/6860)

(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 , Perchlorate

Conc. $\frac{\left[\frac{(355118)(200)}{(1641479)}\right] - 2.9055}{(1.1599)}$

$= 34.8$

final conc. $= \frac{(34.8)(0.1\,L)}{(10.5g)(0.951)} = 0.349 \approx 0.35 mg/k$

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

280-36365-2

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Nov-2012	SL-506-SA6-SB-0.0-0.5-RS	280-36365-3	N	1613	1613B	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0	280-36365-5	N	1613	1613B	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MS	280-36365-5 MS	MS	1613	1613B	III
28-Nov-2012	SL-507-SA6-SB-3.0-4.0MSD	280-36365-5 MSD	MSD	1613	1613B	III
28-Nov-2012	SL-907-SA6-SB-3.0-4.0	280-36365-7	FD	1613	1613B	III
28-Nov-2012	SL-522-SA6-SB-4.0-5.0	280-36365-11	N	1613	1613B	III
28-Nov-2012	SL-511-SA6-SB-2.5-3.5	280-36365-17	N	1613	1613B	III
28-Nov-2012	SL-513-SA6-SB-4.0-5.0	280-36365-14	N	1613	1613B	III
28-Nov-2012	SL-517-SA6-SB-0.0-0.5	280-36365-23	N	1613	1613B	III
28-Nov-2012	SL-517-SA6-SB-2.0-3.0	280-36365-20	N	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36365-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-506-SA6-SB-0.0-0.5-RS *Collected:* 11/28/2012 8:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.63	Q J	0.071	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.19	J	0.15	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.14	Q J	0.061	MDL	5.4	MRL	ng/kg	J	Z
OCDF	1.0	Q J	0.096	MDL	11	MRL	ng/kg	J	Z

Sample ID: SL-507-SA6-SB-3.0-4.0 *Collected:* 11/28/2012 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.28	J	0.11	MDL	5.0	MRL	ng/kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.076	U	0.076	MDL	5.0	MRL	ng/kg	UJ	FD
OCDD	2.1	Q B J	0.16	MDL	10	MRL	ng/kg	J	Z, FD
OCDF	0.14	U	0.14	MDL	10	MRL	ng/kg	UJ	FD

Sample ID: SL-511-SA6-SB-2.5-3.5 *Collected:* 11/28/2012 12:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.7	J	0.064	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.24	Q J	0.096	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.1	J	0.047	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.33	J	0.061	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.21	Q J	0.048	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.13	Q J	0.057	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.10	Q J	0.044	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.14	Q J	0.064	MDL	5.0	MRL	ng/kg	J	Z
OCDF	4.8	S J	0.084	MDL	10	MRL	ng/kg	J	Z

Sample ID: SL-513-SA6-SB-4.0-5.0 *Collected:* 11/28/2012 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.66	Q J	0.11	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.071	J	0.069	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.17	C J	0.052	MDL	5.0	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36365-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-513-SA6-SB-4.0-5.0** ***Collected:*** **11/28/2012 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.91	J	0.068	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.30	Q J	0.051	MDL	5.0	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.19	C J	0.064	MDL	5.0	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.10	Q J	0.054	MDL	5.0	MRL	ng/kg	J	Z

Sample ID: **SL-517-SA6-SB-0.0-0.5** ***Collected:*** **11/28/2012 2:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.56	Q J	0.19	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.21	J	0.10	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.22	Q J	0.062	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	2.0	J	0.10	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.57	Q J	0.065	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.49	C J	0.097	MDL	5.1	MRL	ng/kg	J	Z
OCDF	8.5	S J	0.15	MDL	10	MRL	ng/kg	J	Z

Sample ID: **SL-517-SA6-SB-2.0-3.0** ***Collected:*** **11/28/2012 2:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.15	J	0.066	MDL	5.1	MRL	ng/kg	J	Z
OCDD	2.2	B J	0.055	MDL	10	MRL	ng/kg	J	Z
OCDF	0.10	Q J	0.054	MDL	10	MRL	ng/kg	J	Z

Sample ID: **SL-522-SA6-SB-4.0-5.0** ***Collected:*** **11/28/2012 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	0.22	B J	0.074	MDL	10	MRL	ng/kg	U	B

Sample ID: **SL-907-SA6-SB-3.0-4.0** ***Collected:*** **11/28/2012 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.070	U	0.070	MDL	5.1	MRL	ng/kg	UJ	FD
1,2,3,4,6,7,8-HPCDF	0.096	J	0.048	MDL	5.1	MRL	ng/kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36365-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-907-SA6-SB-3.0-4.0** ***Collected:*** **11/28/2012 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*
OCDD	0.93	B J	0.067	MDL	10	MRL	ng/kg	UJ	B, FD
OCDF	0.22	S J	0.083	MDL	10	MRL	ng/kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36365-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36365-2 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
FD	Field Duplicate Precision
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36365-2/
H2L030403

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36365-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36365-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2L030000023B	12/12/2012 3:42:00 PM	OCDD	0.33 ng/kg	SL-506-SA6-SB-0.0-0.5-RS SL-507-SA6-SB-3.0-4.0 SL-511-SA6-SB-2.5-3.5 SL-513-SA6-SB-4.0-5.0 SL-517-SA6-SB-0.0-0.5 SL-517-SA6-SB-2.0-3.0 SL-522-SA6-SB-4.0-5.0 SL-907-SA6-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-522-SA6-SB-4.0-5.0(RES)	OCDD	0.22 ng/kg	0.22U ng/kg
SL-907-SA6-SB-3.0-4.0(RES)	OCDD	0.93 ng/kg	0.93U ng/kg

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36365-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36365-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/kg)		Sample RPD	eQAPP RPD	Flag
	SL-507-SA6-SB-3.0-4.0	SL-907-SA6-SB-3.0-4.0			
1,2,3,4,6,7,8-HPCDD	0.28	5.1 U	200	50.00	
1,2,3,4,6,7,8-HPCDF	5.0 U	0.096	200	50.00	J (all detects)
OCDD	2.1	0.93	77	50.00	UJ (all non-detects)
OCDF	10 U	0.22	200	50.00	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36365-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36365-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-506-SA6-SB-0.0-0.5-RS	1,2,3,4,6,7,8-HPCDF	Q J	0.63	5.4	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	J	0.19	5.4	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	Q J	0.14	5.4	MRL	ng/kg	
	OCDF	Q J	1.0	11	MRL	ng/kg	
SL-507-SA6-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	J	0.28	5.0	MRL	ng/kg	J (all detects)
	OCDD	Q B J	2.1	10	MRL	ng/kg	
SL-511-SA6-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDF	J	3.7	5.0	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	Q J	0.24	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	1.1	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.33	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.21	5.0	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	Q J	0.13	5.0	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.10	5.0	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.14	5.0	MRL	ng/kg	
	OCDF	S J	4.8	10	MRL	ng/kg	
SL-513-SA6-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	Q J	0.66	5.0	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.071	5.0	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	C J	0.17	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.91	5.0	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.30	5.0	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	0.19	5.0	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.10	5.0	MRL	ng/kg	
SL-517-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	Q J	0.56	5.1	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.21	5.1	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.22	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	2.0	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.57	5.1	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	0.49	5.1	MRL	ng/kg	
	OCDF	S J	8.5	10	MRL	ng/kg	
SL-517-SA6-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	J	0.15	5.1	MRL	ng/kg	J (all detects)
	OCDD	B J	2.2	10	MRL	ng/kg	
	OCDF	Q J	0.10	10	MRL	ng/kg	
SL-522-SA6-SB-4.0-5.0	OCDD	B J	0.22	10	MRL	ng/kg	J (all detects)
SL-907-SA6-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDF	J	0.096	5.1	MRL	ng/kg	J (all detects)
	OCDD	B J	0.93	10	MRL	ng/kg	
	OCDF	S J	0.22	10	MRL	ng/kg	

SAMPLE DELIVERY GROUP

280-36428-1

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Nov-2012	TB-112912	280-36428-8	TB	METHOD	8015B GRO	III
29-Nov-2012	SL-579-SA6-SB-0.0-0.5	280-36428-10	N	3546	8270C SIM	III
29-Nov-2012	SL-579-SA6-SB-0.0-0.5	280-36428-10	N	3550C	8015B EFH	III
29-Nov-2012	SL-579-SA6-SB-0.0-0.5	280-36428-11	N	3050B	6010C	III
29-Nov-2012	SL-579-SA6-SB-0.0-0.5	280-36428-11	N	3050B	6020A	III
29-Nov-2012	SL-579-SA6-SB-0.0-0.5	280-36428-11	N	3546	8082A	III
29-Nov-2012	SL-579-SA6-SB-0.0-0.5	280-36428-11	N	7471B	7471B	III
29-Nov-2012	SL-579-SA6-SB-2.0-3.0	280-36428-12	N	3546	8270C SIM	III
29-Nov-2012	SL-579-SA6-SB-2.0-3.0	280-36428-12	N	3550C	8015B EFH	III
29-Nov-2012	SL-579-SA6-SB-2.0-3.0	280-36428-13	N	3050B	6010C	III
29-Nov-2012	SL-579-SA6-SB-2.0-3.0	280-36428-13	N	3050B	6020A	III
29-Nov-2012	SL-579-SA6-SB-2.0-3.0	280-36428-13	N	3546	8082A	III
29-Nov-2012	SL-579-SA6-SB-2.0-3.0	280-36428-13	N	7471B	7471B	III
29-Nov-2012	SL-579-SA6-SB-2.5	280-36428-14	N	5035	8015B GRO	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-15	N	3546	8270C SIM	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-15	N	3550C	8015B EFH	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-16	N	3050B	6010C	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-16	N	3050B	6020A	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-16	N	3546	8081B	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-16	N	3546	8082A	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-16	N	7471B	7471B	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-16	N	8151A	8151A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-20	N	3546	8270C SIM	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-20	N	3550C	8015B EFH	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-20MS	MS	3546	8270C SIM	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-20MS	MS	3550C	8015B EFH	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-20MSD	MSD	3546	8270C SIM	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-20MSD	MSD	3550C	8015B EFH	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-21	N	3050B	6010C	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-21	N	3050B	6020A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-21	N	3546	8081B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-21	N	3546	8082A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-21	N	7471B	7471B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-21	N	8151A	8151A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-21MS	MS	3050B	6010C	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-21MS	MS	3050B	6020A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-21MS	MS	3546	8081B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-21MS	MS	3546	8082A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-21MS	MS	7471B	7471B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-21MS	MS	8151A	8151A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-21MSD	MSD	3050B	6010C	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-21MSD	MSD	3050B	6020A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-21MSD	MSD	3546	8081B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-21MSD	MSD	3546	8082A	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-21MSD	MSD	7471B	7471B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-21MSD	MSD	8151A	8151A	III
29-Nov-2012	SL-586-SA6-SB-4.0	280-36428-22	N	5035	8015B GRO	III
29-Nov-2012	SL-586-SA6-SB-4.0MS	280-36428-22MS	MS	5035	8015B GRO	III
29-Nov-2012	SL-586-SA6-SB-4.0MSD	280-36428-22MSD	MSD	5035	8015B GRO	III
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-17	FD	3546	8270C SIM	III
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-17	FD	3550C	8015B EFH	III
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-18	FD	3050B	6010C	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-18	FD	3050B	6020A	III
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-18	FD	3546	8081B	III
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-18	FD	3546	8082A	III
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-18	FD	7471B	7471B	III
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-18	FD	8151A	8151A	III
29-Nov-2012	SL-986-SA6-SB-4.0	280-36428-19	FD	5035	8015B GRO	III
29-Nov-2012	SL-580-SA6-SB-0.0-0.5	280-36428-6	N	3546	8270C SIM	III
29-Nov-2012	SL-580-SA6-SB-0.0-0.5	280-36428-6	N	3550C	8015B EFH	III
29-Nov-2012	SL-580-SA6-SB-0.0-0.5	280-36428-7	N	3050B	6010C	III
29-Nov-2012	SL-580-SA6-SB-0.0-0.5	280-36428-7	N	3050B	6020A	III
29-Nov-2012	SL-580-SA6-SB-0.0-0.5	280-36428-7	N	3546	8082A	III
29-Nov-2012	SL-580-SA6-SB-0.0-0.5	280-36428-7	N	7471B	7471B	III
29-Nov-2012	SL-561-SA6-SB-0.0-0.5	280-36428-1	N	3546	8270C SIM	III
29-Nov-2012	SL-561-SA6-SB-0.0-0.5	280-36428-1	N	3550C	8015B EFH	III
29-Nov-2012	SL-561-SA6-SB-0.0-0.5	280-36428-2	N	3050B	6010C	III
29-Nov-2012	SL-561-SA6-SB-0.0-0.5	280-36428-2	N	3050B	6020A	III
29-Nov-2012	SL-561-SA6-SB-0.0-0.5	280-36428-2	N	3546	8082A	III
29-Nov-2012	SL-561-SA6-SB-0.0-0.5	280-36428-2	N	7471B	7471B	III
29-Nov-2012	SL-561-SA6-SB-3.5-4.5	280-36428-3	N	3546	8270C SIM	III
29-Nov-2012	SL-561-SA6-SB-3.5-4.5	280-36428-3	N	3550C	8015B EFH	III
29-Nov-2012	SL-561-SA6-SB-3.5-4.5	280-36428-4	N	3050B	6010C	III
29-Nov-2012	SL-561-SA6-SB-3.5-4.5	280-36428-4	N	3050B	6020A	III
29-Nov-2012	SL-561-SA6-SB-3.5-4.5	280-36428-4	N	3546	8082A	III
29-Nov-2012	SL-561-SA6-SB-3.5-4.5	280-36428-4	N	7471B	7471B	III
29-Nov-2012	SL-561-SA6-SB-4.0	280-36428-5	N	5035	8015B GRO	III
29-Nov-2012	SL-578-SA6-SB-0.0-0.5	280-36428-23	N	3546	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
29-Nov-2012	SL-578-SA6-SB-0.0-0.5	280-36428-23	N	3550C	8015B EFH	III
29-Nov-2012	SL-578-SA6-SB-0.0-0.5	280-36428-24	N	3050B	6010C	III
29-Nov-2012	SL-578-SA6-SB-0.0-0.5	280-36428-24	N	3050B	6020A	III
29-Nov-2012	SL-578-SA6-SB-0.0-0.5	280-36428-24	N	3546	8082A	III
29-Nov-2012	SL-578-SA6-SB-0.0-0.5	280-36428-24	N	7471B	7471B	III
29-Nov-2012	SL-577-SA6-SB-0.0-0.5	280-36428-25	N	3546	8270C SIM	III
29-Nov-2012	SL-577-SA6-SB-0.0-0.5	280-36428-25	N	3550C	8015B EFH	III
29-Nov-2012	SL-577-SA6-SB-0.0-0.5	280-36428-26	N	3050B	6010C	III
29-Nov-2012	SL-577-SA6-SB-0.0-0.5	280-36428-26	N	3050B	6020A	III
29-Nov-2012	SL-577-SA6-SB-0.0-0.5	280-36428-26	N	3546	8082A	III
29-Nov-2012	SL-577-SA6-SB-0.0-0.5	280-36428-26	N	7471B	7471B	III
29-Nov-2012	EB1-112912	280-36428-27	EB	3010A	6010C	III
29-Nov-2012	EB1-112912	280-36428-27	EB	3020A	6020A	III
29-Nov-2012	EB1-112912	280-36428-27	EB	3510C	8015B EFH	III
29-Nov-2012	EB1-112912	280-36428-27	EB	3510C	8081B	III
29-Nov-2012	EB1-112912	280-36428-27	EB	3510C	8082A	III
29-Nov-2012	EB1-112912	280-36428-27	EB	3510C	8270C SIM	III
29-Nov-2012	EB1-112912	280-36428-27	EB	7470A	7470A	III
29-Nov-2012	EB1-112912	280-36428-27	EB	8151A	8151A	III
29-Nov-2012	EB1-112912	280-36428-27	EB	METHOD	6860	III
29-Nov-2012	EB1-112912	280-36428-27	EB	METHOD	8015B GRO	III
29-Nov-2012	EB1-112912MS	280-36428-27MS	MS	METHOD	6860	III
29-Nov-2012	EB1-112912MSD	280-36428-27MSD	MSD	METHOD	6860	III
29-Nov-2012	EB2-112912	280-36428-28	EB	3010A	6010C	III
29-Nov-2012	EB2-112912	280-36428-28	EB	3020A	6020A	III
29-Nov-2012	EB2-112912	280-36428-28	EB	3510C	8015B EFH	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Nov-2012	EB2-112912	280-36428-28	EB	3510C	8081B	III
29-Nov-2012	EB2-112912	280-36428-28	EB	3510C	8082A	III
29-Nov-2012	EB2-112912	280-36428-28	EB	3510C	8270C SIM	III
29-Nov-2012	EB2-112912	280-36428-28	EB	7470A	7470A	III
29-Nov-2012	EB2-112912	280-36428-28	EB	8151A	8151A	III
29-Nov-2012	EB2-112912	280-36428-28	EB	METHOD	6860	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: AQ**

Sample ID: EB1-112912 **Collected: 11/29/2012 3:00:00** **Analysis Type: RE2/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	0.19	J	0.092	MDL	1.0	MRL	mg/L	U	B
Zirconium	0.0036	J	0.0024	MDL	0.015	MRL	mg/L	U	B

Sample ID: EB1-112912 **Collected: 11/29/2012 3:00:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MAGNESIUM	0.019	J	0.011	MDL	0.20	MRL	mg/L	J	Z
MANGANESE	0.0023	J B	0.00025	MDL	0.010	MRL	mg/L	U	B

Sample ID: EB2-112912 **Collected: 11/29/2012 3:30:00** **Analysis Type: RE2/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	0.10	J	0.092	MDL	1.0	MRL	mg/L	U	B

Sample ID: EB2-112912 **Collected: 11/29/2012 3:30:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	0.037	J	0.035	MDL	0.20	MRL	mg/L	J	Z
MANGANESE	0.0016	J B	0.00025	MDL	0.010	MRL	mg/L	U	B

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-561-SA6-SB-0.0-0.5 **Collected: 11/29/2012 1:15:00** **Analysis Type: RE2/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z

Sample ID: SL-561-SA6-SB-0.0-0.5 **Collected: 11/29/2012 1:15:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.4	J	1.0	MDL	9.9	MRL	mg/Kg	U	F
LITHIUM	24	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	300	J B	0.10	MDL	500	MRL	mg/Kg	J	Z, A
POTASSIUM	3500	J	42	MDL	6500	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-561-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 1:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	350	J	60	MDL	510	MRL	mg/Kg	J	Z
TIN	4.0	J	0.93	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.6	J	0.36	MDL	8.8	MRL	mg/Kg	J	Z

Sample ID: **SL-561-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 1:40:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z

Sample ID: **SL-561-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 1:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	23	J	0.31	MDL	39	MRL	mg/Kg	J	Z
MANGANESE	190	J B	0.10	MDL	520	MRL	mg/Kg	J	Z, A
POTASSIUM	1900	J	43	MDL	6700	MRL	mg/Kg	J	Z
SODIUM	150	J	62	MDL	520	MRL	mg/Kg	J	Z
TIN	3.7	J	0.96	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.3	J	0.37	MDL	9.0	MRL	mg/Kg	U	F

Sample ID: **SL-577-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 2:55:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14000	J	1.7	MDL	21000	MRL	mg/Kg	J	Z

Sample ID: **SL-577-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 2:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	29	J	0.32	MDL	39	MRL	mg/Kg	J	Z
MANGANESE	310	J B	0.11	MDL	530	MRL	mg/Kg	J	Z, A
POTASSIUM	3100	J	44	MDL	6800	MRL	mg/Kg	J	Z
SODIUM	120	J	63	MDL	530	MRL	mg/Kg	J	Z
TIN	3.9	J	0.97	MDL	12	MRL	mg/Kg	J	Z
Zirconium	1.8	J	0.38	MDL	9.2	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-578-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 2:20:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.4	MDL	19000	MRL	mg/Kg	J	Z

Sample ID: SL-578-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 2:20:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	29	J	0.28	MDL	35	MRL	mg/Kg	J	Z
MANGANESE	350	J B	0.094	MDL	460	MRL	mg/Kg	J	Z, A
POTASSIUM	2700	J	38	MDL	6000	MRL	mg/Kg	J	Z
SODIUM	110	J	55	MDL	470	MRL	mg/Kg	J	Z
TIN	4.4	J	0.85	MDL	10	MRL	mg/Kg	J	Z
Zirconium	1.3	J	0.33	MDL	8.0	MRL	mg/Kg	J	Z

Sample ID: SL-579-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 8:15:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z

Sample ID: SL-579-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 8:15:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	25	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	420	J B	0.098	MDL	490	MRL	mg/Kg	J	Z, A
POTASSIUM	2000	J	40	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	130	J	58	MDL	490	MRL	mg/Kg	J	Z
TIN	3.7	J	0.90	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.5	J	0.35	MDL	8.5	MRL	mg/Kg	J	Z

Sample ID: SL-579-SA6-SB-2.0-3.0 **Collected:** 11/29/2012 8:30:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2500	J	37	MDL	5800	MRL	mg/Kg	J	Z
SODIUM	240	J	53	MDL	450	MRL	mg/Kg	J	Z
Zirconium	1.9	J	0.32	MDL	7.8	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-579-SA6-SB-2.0-3.0 **Collected: 11/29/2012 8:30:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	400	J B	0.090	MDL	450	MRL	mg/Kg	J	Z, A
TIN	4.5	J	0.82	MDL	9.8	MRL	mg/Kg	J	Z

Sample ID: SL-580-SA6-SB-0.0-0.5 **Collected: 11/29/2012 12:50:00** **Analysis Type: RE2/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
LITHIUM	26	J	0.27	MDL	33	MRL	mg/Kg	J	Z
POTASSIUM	3300	J	37	MDL	5700	MRL	mg/Kg	J	Z
SODIUM	76	J	53	MDL	450	MRL	mg/Kg	U	F
Zirconium	1.7	J	0.32	MDL	7.7	MRL	mg/Kg	J	Z

Sample ID: SL-580-SA6-SB-0.0-0.5 **Collected: 11/29/2012 12:50:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.93	J	0.88	MDL	8.7	MRL	mg/Kg	U	F
MANGANESE	280	J B	0.090	MDL	440	MRL	mg/Kg	J	Z, A
TIN	2.0	J	0.82	MDL	9.8	MRL	mg/Kg	J	Z

Sample ID: SL-586-SA6-SB-0.0-0.5 **Collected: 11/29/2012 9:45:00** **Analysis Type: RE2/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z

Sample ID: SL-586-SA6-SB-0.0-0.5 **Collected: 11/29/2012 9:45:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.3	J	0.87	MDL	8.6	MRL	mg/Kg	U	F
LITHIUM	22	J	0.27	MDL	33	MRL	mg/Kg	J	Z
MANGANESE	300	J B	0.089	MDL	440	MRL	mg/Kg	J	Z, A
POTASSIUM	3100	J	37	MDL	5700	MRL	mg/Kg	J	Z
SODIUM	96	J	53	MDL	450	MRL	mg/Kg	J	Z
TIN	3.3	J	0.81	MDL	9.7	MRL	mg/Kg	J	Z
Zirconium	2.1	J	0.32	MDL	7.7	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-586-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 10:00:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z

Sample ID: **SL-586-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 10:00:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.6	J	0.95	MDL	9.4	MRL	mg/Kg	U	F
LITHIUM	24	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	290	J B	0.097	MDL	480	MRL	mg/Kg	J	Z, A
POTASSIUM	2900	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	110	J	57	MDL	490	MRL	mg/Kg	J	Z
TIN	3.6	J	0.89	MDL	11	MRL	mg/Kg	J	Z
Zirconium	2.6	J	0.34	MDL	8.4	MRL	mg/Kg	J	Z

Sample ID: **SL-986-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 10:15:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z

Sample ID: **SL-986-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 10:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.4	J	0.92	MDL	9.1	MRL	mg/Kg	U	F
LITHIUM	22	J	0.28	MDL	35	MRL	mg/Kg	J	Z
MANGANESE	280	J B	0.094	MDL	460	MRL	mg/Kg	J	Z, A
POTASSIUM	2800	J	38	MDL	6000	MRL	mg/Kg	J	Z
SODIUM	130	J	55	MDL	470	MRL	mg/Kg	J	Z
TIN	3.2	J	0.85	MDL	10	MRL	mg/Kg	J	Z
Zirconium	2.3	J	0.33	MDL	8.0	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-561-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 1:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.044	J B	0.014	MDL	9.0	MRL	mg/Kg	UJ	B, Q
ARSENIC	7.3	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	120	J	0.073	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.67	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.22	J	0.0097	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	22	J	0.078	MDL	38	MRL	mg/Kg	J	Z
COBALT	8.5	J	0.0068	MDL	22	MRL	mg/Kg	J	Z
COPPER	25	J	0.073	MDL	30	MRL	mg/Kg	J	Z
LEAD	7.8	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.018	MDL	5.5	MRL	mg/Kg	J	Z
NICKEL	16	J	0.026	MDL	30	MRL	mg/Kg	J	Z
SILVER	0.062	J	0.021	MDL	0.81	MRL	mg/Kg	U	F
THALLIUM	0.31	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	41	J	0.040	MDL	64	MRL	mg/Kg	J	Z
ZINC	81	J	0.33	MDL	110	MRL	mg/Kg	J	Z, Q

Sample ID: **SL-561-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 1:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.027	J B	0.016	MDL	9.7	MRL	mg/Kg	UJ	B, Q
ARSENIC	4.7	J	0.056	MDL	17	MRL	mg/Kg	J	Z
BARIUM	90	J	0.078	MDL	160	MRL	mg/Kg	J	Z
BERYLLIUM	0.71	J	0.025	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.088	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	23	J	0.085	MDL	41	MRL	mg/Kg	J	Z
COBALT	6.0	J	0.0074	MDL	23	MRL	mg/Kg	J	Z
COPPER	8.3	J	0.079	MDL	32	MRL	mg/Kg	J	Z
LEAD	5.9	J	0.020	MDL	38	MRL	mg/Kg	J	Z
MOLYBDENUM	0.37	J	0.020	MDL	5.9	MRL	mg/Kg	J	Z
NICKEL	14	J	0.028	MDL	32	MRL	mg/Kg	J	Z
THALLIUM	0.22	J	0.0039	MDL	0.51	MRL	mg/Kg	J	Z
VANADIUM	38	J	0.043	MDL	69	MRL	mg/Kg	J	Z
ZINC	52	J	0.35	MDL	120	MRL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-577-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 2:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.018	J B	0.013	MDL	7.9	MRL	mg/Kg	UJ	B, Q
ARSENIC	5.1	J	0.046	MDL	14	MRL	mg/Kg	J	Z
BARIUM	95	J	0.064	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.56	J	0.020	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.23	J	0.0085	MDL	0.90	MRL	mg/Kg	J	Z
CHROMIUM	23	J	0.069	MDL	33	MRL	mg/Kg	J	Z
COBALT	7.0	J	0.0060	MDL	19	MRL	mg/Kg	J	Z
COPPER	12	J	0.064	MDL	26	MRL	mg/Kg	J	Z
LEAD	9.1	J	0.016	MDL	31	MRL	mg/Kg	J	Z
MOLYBDENUM	0.32	J	0.016	MDL	4.8	MRL	mg/Kg	J	Z
NICKEL	14	J	0.023	MDL	26	MRL	mg/Kg	J	Z
SILVER	0.053	J	0.018	MDL	0.71	MRL	mg/Kg	U	F
THALLIUM	0.26	J	0.0032	MDL	0.42	MRL	mg/Kg	J	Z
VANADIUM	39	J	0.035	MDL	56	MRL	mg/Kg	J	Z
ZINC	63	J	0.29	MDL	100	MRL	mg/Kg	J	Z, Q

Sample ID: **SL-578-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 2:20:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.022	J B	0.014	MDL	8.4	MRL	mg/Kg	UJ	B, Q
ARSENIC	5.2	J	0.049	MDL	15	MRL	mg/Kg	J	Z
BARIUM	74	J	0.068	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.57	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.19	J	0.0091	MDL	0.97	MRL	mg/Kg	J	Z
CHROMIUM	24	J	0.074	MDL	36	MRL	mg/Kg	J	Z
COBALT	7.2	J	0.0064	MDL	20	MRL	mg/Kg	J	Z
COPPER	12	J	0.069	MDL	28	MRL	mg/Kg	J	Z
LEAD	7.3	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.72	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	15	J	0.025	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.050	J	0.020	MDL	0.77	MRL	mg/Kg	U	F
THALLIUM	0.27	J	0.0034	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	39	J	0.037	MDL	60	MRL	mg/Kg	J	Z
ZINC	78	J	0.31	MDL	110	MRL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-579-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 8:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.023	J B	0.013	MDL	8.3	MRL	mg/Kg	UJ	B, Q
ARSENIC	6.2	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	93	J	0.067	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.67	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.16	J	0.0090	MDL	0.96	MRL	mg/Kg	J	Z
CHROMIUM	25	J	0.073	MDL	35	MRL	mg/Kg	J	Z
COBALT	7.8	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	14	J	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	6.9	J	0.017	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.36	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	14	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.13	J	0.019	MDL	0.76	MRL	mg/Kg	U	F
THALLIUM	0.31	J	0.0034	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	43	J	0.037	MDL	59	MRL	mg/Kg	J	Z
ZINC	66	J	0.30	MDL	110	MRL	mg/Kg	J	Z, Q

Sample ID: **SL-579-SA6-SB-2.0-3.0** ***Collected:*** **11/29/2012 8:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.032	J B	0.014	MDL	8.8	MRL	mg/Kg	UJ	B, Q
ARSENIC	10	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	110	J	0.071	MDL	140	MRL	mg/Kg	J	Z
CADMIUM	0.24	J	0.0095	MDL	1.0	MRL	mg/Kg	J	Z
COBALT	15	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
LEAD	13	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.57	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	26	J	0.026	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.069	J	0.021	MDL	0.80	MRL	mg/Kg	U	F
THALLIUM	0.38	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	62	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	100	J	0.32	MDL	110	MRL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-580-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 12:50:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.020	J B	0.013	MDL	7.9	MRL	mg/Kg	UJ	B, Q
ARSENIC	4.2	J	0.046	MDL	14	MRL	mg/Kg	J	Z
BARIUM	95	J	0.064	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.57	J	0.020	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.17	J	0.0085	MDL	0.91	MRL	mg/Kg	J	Z
CHROMIUM	21	J	0.069	MDL	34	MRL	mg/Kg	J	Z
COBALT	6.5	J	0.0060	MDL	19	MRL	mg/Kg	J	Z
COPPER	11	J	0.065	MDL	26	MRL	mg/Kg	J	Z
LEAD	6.0	J	0.017	MDL	31	MRL	mg/Kg	J	Z
MOLYBDENUM	0.29	J	0.016	MDL	4.8	MRL	mg/Kg	J	Z
NICKEL	14	J	0.023	MDL	26	MRL	mg/Kg	J	Z
SILVER	0.031	J	0.018	MDL	0.72	MRL	mg/Kg	U	F
THALLIUM	0.24	J	0.0032	MDL	0.42	MRL	mg/Kg	J	Z
VANADIUM	37	J	0.035	MDL	56	MRL	mg/Kg	J	Z
ZINC	65	J	0.29	MDL	100	MRL	mg/Kg	J	Z, Q

Sample ID: **SL-586-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 9:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.017	J B	0.013	MDL	8.3	MRL	mg/Kg	UJ	B, Q
ARSENIC	4.0	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	96	J	0.067	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.61	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.21	J	0.0089	MDL	0.95	MRL	mg/Kg	J	Z
CHROMIUM	20	J	0.072	MDL	35	MRL	mg/Kg	J	Z
COBALT	6.0	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	10	J	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	24	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.36	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	14	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.060	J	0.019	MDL	0.75	MRL	mg/Kg	U	F
THALLIUM	0.25	J	0.0033	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	35	J	0.037	MDL	59	MRL	mg/Kg	J	Z
ZINC	57	J	0.30	MDL	100	MRL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-586-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 10:00:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.018	J B	0.015	MDL	9.1	MRL	mg/Kg	UJ	B, Q
ARSENIC	4.7	J	0.053	MDL	16	MRL	mg/Kg	J	Z
BARIUM	120	J	0.074	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.88	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.24	J	0.0098	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	26	J	0.080	MDL	39	MRL	mg/Kg	J	Z
COBALT	7.4	J	0.0070	MDL	22	MRL	mg/Kg	J	Z
COPPER	12	J	0.075	MDL	30	MRL	mg/Kg	J	Z
LEAD	6.9	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.018	MDL	5.6	MRL	mg/Kg	J	Z
NICKEL	17	J	0.027	MDL	30	MRL	mg/Kg	J	Z
SILVER	0.057	J	0.021	MDL	0.83	MRL	mg/Kg	U	F
THALLIUM	0.31	J	0.0037	MDL	0.48	MRL	mg/Kg	J	Z
VANADIUM	43	J	0.040	MDL	65	MRL	mg/Kg	J	Z
ZINC	60	J	0.33	MDL	120	MRL	mg/Kg	J	Z, Q

Sample ID: **SL-986-SA6-SB-3.5-4.5** ***Collected:*** **11/29/2012 10:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.014	J B	0.013	MDL	8.2	MRL	mg/Kg	UJ	B, Q
ARSENIC	4.2	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	120	J	0.067	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.69	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.25	J	0.0089	MDL	0.94	MRL	mg/Kg	J	Z
CHROMIUM	24	J	0.072	MDL	35	MRL	mg/Kg	J	Z
COBALT	7.0	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	12	J	0.067	MDL	27	MRL	mg/Kg	J	Z
LEAD	6.4	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	17	J	0.024	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.049	J	0.019	MDL	0.75	MRL	mg/Kg	U	F
THALLIUM	0.29	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z
VANADIUM	40	J	0.036	MDL	59	MRL	mg/Kg	J	Z
ZINC	57	J	0.30	MDL	100	MRL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 7471B **Matrix:** SO

Sample ID: SL-561-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 1:15:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.013	J	0.0062	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-561-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 1:40:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.011	J	0.0067	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: SL-577-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 2:55:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.014	J	0.0061	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-578-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 2:20:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0090	J	0.0069	MDL	0.025	MRL	mg/Kg	J	Z

Sample ID: SL-579-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 8:15:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.017	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-579-SA6-SB-2.0-3.0 **Collected:** 11/29/2012 8:30:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.011	J	0.0070	MDL	0.025	MRL	mg/Kg	J	Z

Sample ID: SL-580-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 12:50:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0063	J	0.0063	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-586-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 9:45:00 **Analysis Type:** RES/TOT **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	0.025	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-586-SA6-SB-3.5-4.5 **Collected: 11/29/2012 10:00:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0067	U	0.0067	MDL	0.024	MRL	mg/Kg	UJ	FD

Sample ID: SL-986-SA6-SB-3.5-4.5 **Collected: 11/29/2012 10:15:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0071	J	0.0066	MDL	0.024	MRL	mg/Kg	J	Z, FD

Method Category: SVOA

Method: 8015B EFH **Matrix: AQ**

Sample ID: EB1-112912 **Collected: 11/29/2012 3:00:00** **Analysis Type: RE2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	0.12	J	0.11	MDL	0.26	MRL	mg/L	J	Z

Sample ID: EB2-112912 **Collected: 11/29/2012 3:30:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	0.11	J	0.11	MDL	0.28	MRL	mg/L	J	Z

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-561-SA6-SB-0.0-0.5 **Collected: 11/29/2012 1:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	1.4	J	1.1	MDL	5.3	MRL	mg/Kg	J	Z

Sample ID: SL-561-SA6-SB-3.5-4.5 **Collected: 11/29/2012 1:40:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C30-C40)	2.9	J	1.1	MDL	11	MRL	mg/Kg	J	Z
TOTAL EFH(C8-C40)	3.9	J	0.74	MDL	4.3	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix:** SO

Sample ID: SL-577-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 2:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	1.7	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z

Sample ID: SL-579-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 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
EFH(C15-C20)	1.4	J	1.0	MDL	5.1	MRL	mg/Kg	J	Z

Sample ID: SL-579-SA6-SB-2.0-3.0 **Collected:** 11/29/2012 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
EFH(C30-C40)	2.2	J	1.1	MDL	11	MRL	mg/Kg	J	Z
TOTAL EFH(C8-C40)	2.8	J	0.72	MDL	4.2	MRL	mg/Kg	J	Z

Sample ID: SL-580-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 12:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	2.4	J	1.1	MDL	5.3	MRL	mg/Kg	J	Z

Sample ID: SL-586-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 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
EFH(C15-C20)	1.2	J	1.0	MDL	5.2	MRL	mg/Kg	J	Z

Sample ID: SL-586-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 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
EFH(C30-C40)	1.5	J	1.0	MDL	10	MRL	mg/Kg	J	Z
TOTAL EFH(C8-C40)	2.3	J	0.69	MDL	4.1	MRL	mg/Kg	J	Z

Sample ID: SL-986-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 10:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C30-C40)	2.0	J	1.0	MDL	10	MRL	mg/Kg	J	Z
TOTAL EFH(C8-C40)	3.0	J	0.69	MDL	4.1	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8081B **Matrix: SO**

Sample ID: SL-586-SA6-SB-0.0-0.5 **Collected: 11/29/2012 9:45:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	4.2	p	0.58	MDL	3.5	MRL	ug/Kg	J	S
ENDOSULFAN SULFATE	0.35	J p	0.29	MDL	3.5	MRL	ug/Kg	J	Z, S
ENDRIN KETONE	0.54	J p	0.52	MDL	3.5	MRL	ug/Kg	J	Z, S

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-586-SA6-SB-0.0-0.5 **Collected: 11/29/2012 9:45:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	15	U *	15	MDL	420	MRL	ug/Kg	R	L

Sample ID: SL-586-SA6-SB-3.5-4.5 **Collected: 11/29/2012 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
2,4-DB	14	J p	7.7	MDL	82	MRL	ug/Kg	J	Z, FD
DICAMBA	1.4	U	1.4	MDL	41	MRL	ug/Kg	UJ	FD
DINOSEB	1.4	U *	1.4	MDL	41	MRL	ug/Kg	R	Q, L
MCPA	5000	J	2100	MDL	6700	MRL	ug/Kg	J	Z, FD

Sample ID: SL-986-SA6-SB-3.5-4.5 **Collected: 11/29/2012 10:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	7.7	U	7.7	MDL	83	MRL	ug/Kg	UJ	FD
DICAMBA	2.8	J	1.4	MDL	41	MRL	ug/Kg	J	Z, FD
DINOSEB	1.4	U *	1.4	MDL	41	MRL	ug/Kg	R	L
MCPA	2100	U	2100	MDL	6700	MRL	ug/Kg	UJ	FD

Method Category: SVOA

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

Sample ID: EB1-112912 **Collected: 11/29/2012 3:00:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.011	J	0.0059	MDL	0.10	MRL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: EB1-112912 **Collected: 11/29/2012 3:00:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.013	J	0.0053	MDL	0.10	MRL	ug/L	J	Z
ANTHRACENE	0.023	J	0.015	MDL	0.10	MRL	ug/L	J	Z
BENZO(A)ANTHRACENE	0.0047	J	0.0033	MDL	0.10	MRL	ug/L	J	Z
BENZO(B)FLUORANTHENE	0.0046	J	0.0036	MDL	0.10	MRL	ug/L	J	Z
FLUORANTHENE	0.0064	J	0.0047	MDL	0.10	MRL	ug/L	J	Z
FLUORENE	0.020	J	0.019	MDL	0.10	MRL	ug/L	J	Z
NAPHTHALENE	0.056	J B	0.0055	MDL	0.10	MRL	ug/L	J	Z
PHENANTHRENE	0.024	J	0.010	MDL	0.10	MRL	ug/L	J	Z

Sample ID: EB2-112912 **Collected: 11/29/2012 3:30:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.012	J	0.0061	MDL	0.11	MRL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.012	J	0.0055	MDL	0.11	MRL	ug/L	J	Z
ANTHRACENE	0.022	J	0.015	MDL	0.11	MRL	ug/L	J	Z
FLUORENE	0.020	J	0.020	MDL	0.11	MRL	ug/L	J	Z
NAPHTHALENE	0.056	J B	0.0057	MDL	0.11	MRL	ug/L	J	Z
PHENANTHRENE	0.022	J	0.010	MDL	0.11	MRL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: SL-561-SA6-SB-0.0-0.5 **Collected: 11/29/2012 1:15:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.33	J	0.33	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHENE	1.0	J	0.17	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.19	J	0.18	MDL	11	MRL	ug/Kg	J	Z
ANTHRACENE	1.9	J	0.77	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	6.2	J	0.96	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	5.0	J	0.79	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	7.2	J	1.3	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	3.7	J	1.2	MDL	11	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	2.7	J	1.1	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-561-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 1:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	8.2	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	0.60	J	0.50	MDL	11	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	3.5	J	1.2	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	0.55	J	0.35	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-561-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 1:40:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	3.3	J	1.1	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-577-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 2:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.48	J	0.28	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.66	J	0.33	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHENE	1.0	J	0.17	MDL	11	MRL	ug/Kg	J	Z
ANTHRACENE	1.4	J	0.76	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	8.3	J	0.95	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	8.4	J	0.78	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	5.8	J	1.2	MDL	11	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	4.9	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	0.57	J	0.50	MDL	11	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	6.3	J	1.2	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.35	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-579-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 8:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.54	J	0.27	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.76	J	0.33	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	0.78	J	0.78	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.9	J	1.3	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	2.2	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	2.8	J	1.1	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.34	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-579-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 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
PHENANTHRENE	3.2	J	1.2	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-580-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 12:50:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.32	J	0.32	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.94	MDL	10	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.77	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.1	J	1.3	MDL	10	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	1.1	MDL	10	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	1.0	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	3.5	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	5.3	J	1.0	MDL	10	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	1.1	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	0.60	J	0.34	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	4.4	J	1.1	MDL	10	MRL	ug/Kg	J	Z
PYRENE	2.6	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: SL-586-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 9:45:00 **Analysis Type:** RES **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.4	J	1.3	MDL	51	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.8	J	1.6	MDL	51	MRL	ug/Kg	J	Z
CHRYSENE	6.8	J	5.1	MDL	51	MRL	ug/Kg	J	Z
FLUORANTHENE	7.9	J	5.1	MDL	51	MRL	ug/Kg	J	Z
PHENANTHRENE	6.8	J	5.6	MDL	51	MRL	ug/Kg	J	Z

Sample ID: SL-586-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 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
ANTHRACENE	1.7	J	0.75	MDL	10	MRL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	8.5	J	0.93	MDL	10	MRL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	7.0	J	0.77	MDL	10	MRL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	7.6	J	1.2	MDL	10	MRL	ug/Kg	J	Z, FD
BENZO(G,H,I)PERYLENE	6.8	J	1.1	MDL	10	MRL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-586-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 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(K)FLUORANTHENE	7.9	J	1.0	MDL	10	MRL	ug/Kg	J	Z, Q, FD
CHRYSENE	9.2	J	1.0	MDL	10	MRL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	6.5	J	1.3	MDL	10	MRL	ug/Kg	J	Z, FD
FLUORANTHENE	5.0	J	1.0	MDL	10	MRL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	6.8	J	1.1	MDL	10	MRL	ug/Kg	J	Z, FD
NAPHTHALENE	0.34	U	0.34	MDL	10	MRL	ug/Kg	UJ	FD
PHENANTHRENE	1.4	J	1.1	MDL	10	MRL	ug/Kg	J	Z, FD
PYRENE	3.1	J	1.1	MDL	10	MRL	ug/Kg	J	Z, FD

Sample ID: SL-986-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 10:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.71	U	0.71	MDL	9.9	MRL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	0.89	U	0.89	MDL	9.9	MRL	ug/Kg	UJ	FD
BENZO(A)PYRENE	0.73	U	0.73	MDL	9.9	MRL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	1.2	U	1.2	MDL	9.9	MRL	ug/Kg	UJ	FD
BENZO(G,H,I)PERYLENE	1.1	U	1.1	MDL	9.9	MRL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.99	U	0.99	MDL	9.9	MRL	ug/Kg	UJ	FD
CHRYSENE	0.99	U	0.99	MDL	9.9	MRL	ug/Kg	UJ	FD
DIBENZO(A,H)ANTHRACENE	1.3	U	1.3	MDL	9.9	MRL	ug/Kg	UJ	FD
FLUORANTHENE	0.99	U	0.99	MDL	9.9	MRL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	1.1	U	1.1	MDL	9.9	MRL	ug/Kg	UJ	FD
NAPHTHALENE	0.32	J	0.32	MDL	9.9	MRL	ug/Kg	J	Z, FD
PHENANTHRENE	1.1	U	1.1	MDL	9.9	MRL	ug/Kg	UJ	FD
PYRENE	1.1	U	1.1	MDL	9.9	MRL	ug/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
L	Laboratory Control Spike Lower Rejection
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36428-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150479/1-A	12/6/2012 12:29:00 PM	MANGANESE	0.000520 mg/L	EB1-112912 EB2-112912
MB 280-151582/1-A	12/11/2012 10:53:00 PM	LITHIUM	0.00287 mg/L	EB1-112912 EB2-112912

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-112912(RES/TOT)	MANGANESE	0.0023 mg/L	0.0023U mg/L
EB2-112912(RES/TOT)	MANGANESE	0.0016 mg/L	0.0016U mg/L

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150101/1-A	12/5/2012 7:12:00 PM	MANGANESE	0.178 mg/Kg	SL-561-SA6-SB-0.0-0.5 SL-561-SA6-SB-3.5-4.5 SL-577-SA6-SB-0.0-0.5 SL-578-SA6-SB-0.0-0.5 SL-579-SA6-SB-0.0-0.5 SL-579-SA6-SB-2.0-3.0 SL-580-SA6-SB-0.0-0.5 SL-586-SA6-SB-0.0-0.5 SL-586-SA6-SB-3.5-4.5 SL-986-SA6-SB-3.5-4.5

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150100/1-A	12/4/2012 7:54:00 PM	ANTIMONY	0.0216 mg/Kg	SL-561-SA6-SB-0.0-0.5 SL-561-SA6-SB-3.5-4.5 SL-577-SA6-SB-0.0-0.5 SL-578-SA6-SB-0.0-0.5 SL-579-SA6-SB-0.0-0.5 SL-579-SA6-SB-2.0-3.0 SL-580-SA6-SB-0.0-0.5 SL-586-SA6-SB-0.0-0.5 SL-586-SA6-SB-3.5-4.5 SL-986-SA6-SB-3.5-4.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-561-SA6-SB-0.0-0.5(RES/TOT)	ANTIMONY	0.044 mg/Kg	0.044U mg/Kg
SL-561-SA6-SB-3.5-4.5(RES/TOT)	ANTIMONY	0.027 mg/Kg	0.027U mg/Kg
SL-577-SA6-SB-0.0-0.5(RES/TOT)	ANTIMONY	0.018 mg/Kg	0.018U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6020A**
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-578-SA6-SB-0.0-0.5(RES/TOT)	ANTIMONY	0.022 mg/Kg	0.022U mg/Kg
SL-579-SA6-SB-0.0-0.5(RES/TOT)	ANTIMONY	0.023 mg/Kg	0.023U mg/Kg
SL-579-SA6-SB-2.0-3.0(RES/TOT)	ANTIMONY	0.032 mg/Kg	0.032U mg/Kg
SL-580-SA6-SB-0.0-0.5(RES/TOT)	ANTIMONY	0.020 mg/Kg	0.020U mg/Kg
SL-586-SA6-SB-0.0-0.5(RES/TOT)	ANTIMONY	0.017 mg/Kg	0.017U mg/Kg
SL-586-SA6-SB-3.5-4.5(RES/TOT)	ANTIMONY	0.018 mg/Kg	0.018U mg/Kg
SL-986-SA6-SB-3.5-4.5(RES/TOT)	ANTIMONY	0.014 mg/Kg	0.014U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150233/1-A	12/6/2012 2:32:00 PM	NAPHTHALENE	0.00672 ug/L	EB1-112912 EB2-112912

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB1-112912(RE2/TOT)	11/29/2012 3:00:00 PM	SODIUM Zirconium	0.19 mg/L 0.0036 mg/L	SL-561-SA6-SB-3.5-4.5 SL-561-SA6-SB-4.0 SL-579-SA6-SB-2.0-3.0 SL-579-SA6-SB-2.5 SL-586-SA6-SB-3.5-4.5 SL-586-SA6-SB-4.0 SL-986-SA6-SB-3.5-4.5 SL-986-SA6-SB-4.0
EB1-112912(RES/TOT)	11/29/2012 3:00:00 PM	IRON MAGNESIUM MANGANESE	0.88 mg/L 0.019 mg/L 0.0023 mg/L	SL-561-SA6-SB-3.5-4.5 SL-561-SA6-SB-4.0 SL-579-SA6-SB-2.0-3.0 SL-579-SA6-SB-2.5 SL-586-SA6-SB-3.5-4.5 SL-586-SA6-SB-4.0 SL-986-SA6-SB-3.5-4.5 SL-986-SA6-SB-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-561-SA6-SB-3.5-4.5(RES/TOT)	Zirconium	1.3 mg/Kg	1.3U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	BORON SODIUM	0.024 mg/L 0.17 mg/L	SL-561-SA6-SB-0.0-0.5 SL-561-SA6-SB-3.5-4.5 SL-561-SA6-SB-4.0 SL-577-SA6-SB-0.0-0.5 SL-578-SA6-SB-0.0-0.5 SL-579-SA6-SB-0.0-0.5 SL-579-SA6-SB-2.0-3.0 SL-579-SA6-SB-2.5 SL-580-SA6-SB-0.0-0.5 SL-586-SA6-SB-0.0-0.5 SL-586-SA6-SB-3.5-4.5 SL-586-SA6-SB-4.0 SL-986-SA6-SB-3.5-4.5 SL-986-SA6-SB-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-561-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.4 mg/Kg	1.4U mg/Kg
SL-580-SA6-SB-0.0-0.5(RE2/TOT)	SODIUM	76 mg/Kg	76U mg/Kg
SL-580-SA6-SB-0.0-0.5(RES/TOT)	BORON	0.93 mg/Kg	0.93U mg/Kg
SL-586-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.3 mg/Kg	1.3U mg/Kg
SL-586-SA6-SB-3.5-4.5(RES/TOT)	BORON	1.6 mg/Kg	1.6U mg/Kg
SL-986-SA6-SB-3.5-4.5(RES/TOT)	BORON	1.4 mg/Kg	1.4U mg/Kg

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

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	SILVER	0.00078 mg/L	SL-561-SA6-SB-0.0-0.5 SL-561-SA6-SB-3.5-4.5 SL-561-SA6-SB-4.0 SL-577-SA6-SB-0.0-0.5 SL-578-SA6-SB-0.0-0.5 SL-579-SA6-SB-0.0-0.5 SL-579-SA6-SB-2.0-3.0 SL-579-SA6-SB-2.5 SL-580-SA6-SB-0.0-0.5 SL-586-SA6-SB-0.0-0.5 SL-586-SA6-SB-3.5-4.5 SL-586-SA6-SB-4.0 SL-986-SA6-SB-3.5-4.5 SL-986-SA6-SB-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-561-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.062 mg/Kg	0.062U mg/Kg
SL-577-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.053 mg/Kg	0.053U mg/Kg
SL-578-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.050 mg/Kg	0.050U mg/Kg
SL-579-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.13 mg/Kg	0.13U mg/Kg

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Field Blank Sample ID	Collected 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-579-SA6-SB-2.0-3.0(RES/TOT)	SILVER	0.069 mg/Kg	0.069U mg/Kg
SL-580-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.031 mg/Kg	0.031U mg/Kg
SL-586-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.060 mg/Kg	0.060U mg/Kg
SL-586-SA6-SB-3.5-4.5(RES/TOT)	SILVER	0.057 mg/Kg	0.057U mg/Kg
SL-986-SA6-SB-3.5-4.5(RES/TOT)	SILVER	0.049 mg/Kg	0.049U mg/Kg

Surrogate Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **8081B**
Matrix: **SO**

Sample ID (Analysis Type)	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-586-SA6-SB-0.0 -0.5 (DL)	DECACHLOROBIPHENYL	355	20.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-586-SA6-SB-0.0 -0.5	DECACHLOROBIPHENYL	316	20.00-120.00	All Target Analytes	J(all detects)

Method: **8082A**
Matrix: **SO**

Sample ID (Analysis Type)	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-586-SA6-SB-0.0 -0.5	DECACHLOROBIPHENYL	254	45.00-120.00	All Target Analytes	J(all detects)

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

Sample ID (Analysis Type)	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-586-SA6-SB-3.5 -4.5	Terphenyl-d14	139	45.00-135.00	No Affected Compounds	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-586-SA6-SB-3.5-4.5MS (TOT) **SL-586-SA6-SB-3.5-4.5MSD (TOT)** (SL-561-SA6-SB-0.0-0.5 SL -561-SA6-SB-3.5-4.5 SL -577-SA6-SB-0.0-0.5 SL -578-SA6-SB-0.0-0.5 SL -579-SA6-SB-0.0-0.5 SL -579-SA6-SB-2.0-3.0 SL -580-SA6-SB-0.0-0.5 SL -586-SA6-SB-0.0-0.5 SL -586-SA6-SB-3.5-4.5 SL -986-SA6-SB-3.5-4.5)	ANTIMONY	4	5	75.00-125.00	-	ANTIMONY	J (all detects) UJ (all non-detects) Post Spike= 100%
SL-586-SA6-SB-3.5-4.5MSD (TOT) (SL-561-SA6-SB-0.0-0.5 SL -561-SA6-SB-3.5-4.5 SL -577-SA6-SB-0.0-0.5 SL -578-SA6-SB-0.0-0.5 SL -579-SA6-SB-0.0-0.5 SL -579-SA6-SB-2.0-3.0 SL -580-SA6-SB-0.0-0.5 SL -586-SA6-SB-0.0-0.5 SL -586-SA6-SB-3.5-4.5 SL -986-SA6-SB-3.5-4.5)	BARIUM ZINC	- -	39 69	75.00-125.00 75.00-125.00	- -	BARIUM ZINC	J(all detects) UJ(all non-detects) Ba, No Qual, >4x

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-586-SA6-SB-3.5-4.5MS (TOT) **SL-586-SA6-SB-3.5-4.5MSD (TOT)** (SL-561-SA6-SB-0.0-0.5 SL -561-SA6-SB-3.5-4.5 SL -577-SA6-SB-0.0-0.5 SL -578-SA6-SB-0.0-0.5 SL -579-SA6-SB-0.0-0.5 SL -579-SA6-SB-2.0-3.0 SL -580-SA6-SB-0.0-0.5 SL -586-SA6-SB-0.0-0.5 SL -586-SA6-SB-3.5-4.5 SL -986-SA6-SB-3.5-4.5)	ALUMINUM IRON TITANIUM	2573 741 128	2887 589 165	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM IRON TITANIUM	No Qual, >4x
SL-586-SA6-SB-3.5-4.5MSD (TOT) (SL-561-SA6-SB-0.0-0.5 SL -561-SA6-SB-3.5-4.5 SL -577-SA6-SB-0.0-0.5 SL -578-SA6-SB-0.0-0.5 SL -579-SA6-SB-0.0-0.5 SL -579-SA6-SB-2.0-3.0 SL -580-SA6-SB-0.0-0.5 SL -586-SA6-SB-0.0-0.5 SL -586-SA6-SB-3.5-4.5 SL -986-SA6-SB-3.5-4.5)	MANGANESE	-	70	75.00-125.00	-	MANGANESE	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-586-SA6-SB-3.5-4.5MSD (SL-586-SA6-SB-3.5-4.5)	DINOSEB	-	0	5.00-166.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-586-SA6-SB-3.5-4.5MS SL-586-SA6-SB-3.5-4.5MSD (SL-586-SA6-SB-3.5-4.5)	BENZO(K)FLUORANTHENE	42	44	46.00-120.00	-	BENZO(K)FLUORANTHENE	J(all detects) UJ(all non-detects)

Method: 8081B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-586-SA6-SB-3.5-4.5MSD (SL-586-SA6-SB-3.5-4.5)	TOXAPHENE	-	-	19.00-174.00	27 (23.00)	TOXAPHENE	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
LCS 280-150255/2-A (SL-586-SA6-SB-0.0-0.5 SL-586-SA6-SB-3.5-4.5 SL-986-SA6-SB-3.5-4.5)	DINOSEB	3	-	5.00-166.00	-	DINOSEB	J (all detects) R (all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Analyte	Concentration (mg/Kg) SL-586-SA6-SB-3.5-4.5 (TOT)	Concentration (mg/Kg) SL-986-SA6-SB-3.5-4.5 (TOT)	Sample RPD	eQAPP RPD	Flag
ALUMINUM	18000	17000	6	50.00	No Qualifiers Applied
BORON	1.6	1.4	13	50.00	
CALCIUM	2000	1900	5	50.00	
IRON	21000	20000	5	50.00	
LITHIUM	24	22	9	50.00	
MAGNESIUM	4500	4200	7	50.00	
MANGANESE	290	280	4	50.00	
PHOSPHORUS	260	260	0	50.00	
POTASSIUM	2900	2800	4	50.00	
SODIUM	110	130	17	50.00	
STRONTIUM	19	18	5	50.00	
TIN	3.6	3.2	12	50.00	
TITANIUM	920	840	9	50.00	
Zirconium	2.6	2.3	12	50.00	

Method: 6020A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-586-SA6-SB-3.5-4.5 (TOT)	Concentration (mg/Kg) SL-986-SA6-SB-3.5-4.5 (TOT)	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.018	0.014	25	50.00	No Qualifiers Applied
ARSENIC	4.7	4.2	11	50.00	
BARIUM	120	120	0	50.00	
BERYLLIUM	0.88	0.69	24	50.00	
CADMIUM	0.24	0.25	4	50.00	
CHROMIUM	26	24	8	50.00	
COBALT	7.4	7.0	6	50.00	
COPPER	12	12	0	50.00	
LEAD	6.9	6.4	8	50.00	
MOLYBDENUM	0.42	0.42	0	50.00	
NICKEL	17	17	0	50.00	
SELENIUM	1.0	1.0	0	50.00	
SILVER	0.057	0.049	15	50.00	
THALLIUM	0.31	0.29	7	50.00	
VANADIUM	43	40	7	50.00	
ZINC	60	57	5	50.00	

Method: 7471B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-586-SA6-SB-3.5-4.5 (TOT)	Concentration (mg/Kg) SL-986-SA6-SB-3.5-4.5 (TOT)	Sample RPD	eQAPP RPD	Flag
MERCURY	0.024 U	0.0071	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015B EFH
Matrix: SO

Analyte	Concentration (mg/Kg) SL-586-SA6-SB-3.5-4.5	Concentration (mg/Kg) SL-986-SA6-SB-3.5-4.5	Sample RPD	eQAPP RPD	Flag
EFH(C30-C40)	1.5	2.0	29	50.00	No Qualifiers Applied
TOTAL EFH(C8-C40)	2.3	3.0	26	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-586-SA6-SB-3.5-4.5	SL-986-SA6-SB-3.5-4.5			
2,4-DB	14	83 U	200	50.00	J(all detects) UJ(all non-detects)
DICAMBA	41 U	2.8	200	50.00	
MCPA	5000	6700 U	200	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-586-SA6-SB-3.5-4.5	SL-986-SA6-SB-3.5-4.5			
ANTHRACENE	1.7	9.9 U	200	50.00	J(all detects) UJ(all non-detects)
BENZO(A)ANTHRACENE	8.5	9.9 U	200	50.00	
BENZO(A)PYRENE	7.0	9.9 U	200	50.00	
BENZO(B)FLUORANTHENE	7.6	9.9 U	200	50.00	
BENZO(G,H,I)PERYLENE	6.8	9.9 U	200	50.00	
BENZO(K)FLUORANTHENE	7.9	9.9 U	200	50.00	
CHRYSENE	9.2	9.9 U	200	50.00	
DIBENZO(A,H)ANTHRACENE	6.5	9.9 U	200	50.00	
FLUORANTHENE	5.0	9.9 U	200	50.00	
INDENO(1,2,3-CD)PYRENE	6.8	9.9 U	200	50.00	
NAPHTHALENE	10 U	0.32	200	50.00	
PHENANTHRENE	1.4	9.9 U	200	50.00	
PYRENE	3.1	9.9 U	200	50.00	

Method: 9045D
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-586-SA6-SB-3.5-4.5	SL-986-SA6-SB-3.5-4.5			
PH	6.75	7.08	5		No Qualifiers Applied
TEMPERATURE	22.2	22.1	0		

Method: BaP EQUIVALENCE
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-586-SA6-SB-3.5-4.5	SL-986-SA6-SB-3.5-4.5			
BAP EQUIVALENCE	16	0.0050 U	200		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-112912	MAGNESIUM	J	0.019	0.20	MRL	mg/L	J (all detects)
	MANGANESE	J B	0.0023	0.010	MRL	mg/L	
	SODIUM	J	0.19	1.0	MRL	mg/L	
	Zirconium	J	0.0036	0.015	MRL	mg/L	
EB2-112912	CALCIUM	J	0.037	0.20	MRL	mg/L	J (all detects)
	MANGANESE	J B	0.0016	0.010	MRL	mg/L	
	SODIUM	J	0.10	1.0	MRL	mg/L	

Method: 8015B EFH
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-112912	TOTAL EFH(C8-C40)	J	0.12	0.26	MRL	mg/L	J (all detects)
EB2-112912	TOTAL EFH(C8-C40)	J	0.11	0.28	MRL	mg/L	J (all detects)

Method: 8270C SIM
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-112912	1-METHYLNAPHTHALENE	J	0.011	0.10	MRL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.013	0.10	MRL	ug/L	
	ANTHRACENE	J	0.023	0.10	MRL	ug/L	
	BENZO(A)ANTHRACENE	J	0.0047	0.10	MRL	ug/L	
	BENZO(B)FLUORANTHENE	J	0.0046	0.10	MRL	ug/L	
	FLUORANTHENE	J	0.0064	0.10	MRL	ug/L	
	FLUORENE	J	0.020	0.10	MRL	ug/L	
	NAPHTHALENE	J B	0.056	0.10	MRL	ug/L	
	PHENANTHRENE	J	0.024	0.10	MRL	ug/L	
EB2-112912	1-METHYLNAPHTHALENE	J	0.012	0.11	MRL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.012	0.11	MRL	ug/L	
	ANTHRACENE	J	0.022	0.11	MRL	ug/L	
	FLUORENE	J	0.020	0.11	MRL	ug/L	
	NAPHTHALENE	J B	0.056	0.11	MRL	ug/L	
	PHENANTHRENE	J	0.022	0.11	MRL	ug/L	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-561-SA6-SB-0.0-0.5	ALUMINUM	J	15000	20000	MRL	mg/Kg	
	BORON	J	1.4	9.9	MRL	mg/Kg	
	LITHIUM	J	24	38	MRL	mg/Kg	
	MANGANESE	J B	300	500	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3500	6500	MRL	mg/Kg	
	SODIUM	J	350	510	MRL	mg/Kg	
	TIN	J	4.0	11	MRL	mg/Kg	
	Zirconium	J	1.6	8.8	MRL	mg/Kg	
SL-561-SA6-SB-3.5-4.5	ALUMINUM	J	18000	21000	MRL	mg/Kg	
	LITHIUM	J	23	39	MRL	mg/Kg	
	MANGANESE	J B	190	520	MRL	mg/Kg	
	POTASSIUM	J	1900	6700	MRL	mg/Kg	J (all detects)
	SODIUM	J	150	520	MRL	mg/Kg	
	TIN	J	3.7	11	MRL	mg/Kg	
	Zirconium	J	1.3	9.0	MRL	mg/Kg	
SL-577-SA6-SB-0.0-0.5	ALUMINUM	J	14000	21000	MRL	mg/Kg	
	LITHIUM	J	29	39	MRL	mg/Kg	
	MANGANESE	J B	310	530	MRL	mg/Kg	
	POTASSIUM	J	3100	6800	MRL	mg/Kg	J (all detects)
	SODIUM	J	120	530	MRL	mg/Kg	
	TIN	J	3.9	12	MRL	mg/Kg	
	Zirconium	J	1.8	9.2	MRL	mg/Kg	
SL-578-SA6-SB-0.0-0.5	ALUMINUM	J	13000	19000	MRL	mg/Kg	
	LITHIUM	J	29	35	MRL	mg/Kg	
	MANGANESE	J B	350	460	MRL	mg/Kg	
	POTASSIUM	J	2700	6000	MRL	mg/Kg	J (all detects)
	SODIUM	J	110	470	MRL	mg/Kg	
	TIN	J	4.4	10	MRL	mg/Kg	
	Zirconium	J	1.3	8.0	MRL	mg/Kg	
SL-579-SA6-SB-0.0-0.5	ALUMINUM	J	15000	20000	MRL	mg/Kg	
	LITHIUM	J	25	36	MRL	mg/Kg	
	MANGANESE	J B	420	490	MRL	mg/Kg	
	POTASSIUM	J	2000	6300	MRL	mg/Kg	J (all detects)
	SODIUM	J	130	490	MRL	mg/Kg	
	TIN	J	3.7	11	MRL	mg/Kg	
	Zirconium	J	1.5	8.5	MRL	mg/Kg	
SL-579-SA6-SB-2.0-3.0	MANGANESE	J B	400	450	MRL	mg/Kg	
	POTASSIUM	J	2500	5800	MRL	mg/Kg	
	SODIUM	J	240	450	MRL	mg/Kg	J (all detects)
	TIN	J	4.5	9.8	MRL	mg/Kg	
	Zirconium	J	1.9	7.8	MRL	mg/Kg	
SL-580-SA6-SB-0.0-0.5	ALUMINUM	J	12000	18000	MRL	mg/Kg	
	BORON	J	0.93	8.7	MRL	mg/Kg	
	LITHIUM	J	26	33	MRL	mg/Kg	
	MANGANESE	J B	280	440	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3300	5700	MRL	mg/Kg	
	SODIUM	J	76	450	MRL	mg/Kg	
	TIN	J	2.0	9.8	MRL	mg/Kg	
	Zirconium	J	1.7	7.7	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-586-SA6-SB-0.0-0.5	ALUMINUM	J	15000	18000	MRL	mg/Kg	
	BORON	J	1.3	8.6	MRL	mg/Kg	
	LITHIUM	J	22	33	MRL	mg/Kg	
	MANGANESE	J B	300	440	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3100	5700	MRL	mg/Kg	
	SODIUM	J	96	450	MRL	mg/Kg	
	TIN	J	3.3	9.7	MRL	mg/Kg	
	Zirconium	J	2.1	7.7	MRL	mg/Kg	
SL-586-SA6-SB-3.5-4.5	ALUMINUM	J	18000	19000	MRL	mg/Kg	
	BORON	J	1.6	9.4	MRL	mg/Kg	
	LITHIUM	J	24	36	MRL	mg/Kg	
	MANGANESE	J B	290	480	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2900	6200	MRL	mg/Kg	
	SODIUM	J	110	490	MRL	mg/Kg	
	TIN	J	3.6	11	MRL	mg/Kg	
	Zirconium	J	2.6	8.4	MRL	mg/Kg	
SL-986-SA6-SB-3.5-4.5	ALUMINUM	J	17000	19000	MRL	mg/Kg	
	BORON	J	1.4	9.1	MRL	mg/Kg	
	LITHIUM	J	22	35	MRL	mg/Kg	
	MANGANESE	J B	280	460	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2800	6000	MRL	mg/Kg	
	SODIUM	J	130	470	MRL	mg/Kg	
	TIN	J	3.2	10	MRL	mg/Kg	
	Zirconium	J	2.3	8.0	MRL	mg/Kg	

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-561-SA6-SB-0.0-0.5	ANTIMONY	J B	0.044	9.0	MRL	mg/Kg	
	ARSENIC	J	7.3	15	MRL	mg/Kg	
	BARIUM	J	120	140	MRL	mg/Kg	
	BERYLLIUM	J	0.67	1.1	MRL	mg/Kg	
	CADMIUM	J	0.22	1.0	MRL	mg/Kg	
	CHROMIUM	J	22	38	MRL	mg/Kg	
	COBALT	J	8.5	22	MRL	mg/Kg	
	COPPER	J	25	30	MRL	mg/Kg	J (all detects)
	LEAD	J	7.8	35	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	5.5	MRL	mg/Kg	
	NICKEL	J	16	30	MRL	mg/Kg	
	SILVER	J	0.062	0.81	MRL	mg/Kg	
	THALLIUM	J	0.31	0.47	MRL	mg/Kg	
	VANADIUM	J	41	64	MRL	mg/Kg	
	ZINC	J	81	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-561-SA6-SB-3.5-4.5	ANTIMONY	J B	0.027	9.7	MRL	mg/Kg	
	ARSENIC	J	4.7	17	MRL	mg/Kg	
	BARIUM	J	90	160	MRL	mg/Kg	
	BERYLLIUM	J	0.71	1.2	MRL	mg/Kg	
	CADMIUM	J	0.088	1.1	MRL	mg/Kg	
	CHROMIUM	J	23	41	MRL	mg/Kg	
	COBALT	J	6.0	23	MRL	mg/Kg	J (all detects)
	COPPER	J	8.3	32	MRL	mg/Kg	
	LEAD	J	5.9	38	MRL	mg/Kg	
	MOLYBDENUM	J	0.37	5.9	MRL	mg/Kg	
	NICKEL	J	14	32	MRL	mg/Kg	
	THALLIUM	J	0.22	0.51	MRL	mg/Kg	
	VANADIUM	J	38	69	MRL	mg/Kg	
	ZINC	J	52	120	MRL	mg/Kg	
SL-577-SA6-SB-0.0-0.5	ANTIMONY	J B	0.018	7.9	MRL	mg/Kg	
	ARSENIC	J	5.1	14	MRL	mg/Kg	
	BARIUM	J	95	130	MRL	mg/Kg	
	BERYLLIUM	J	0.56	1.0	MRL	mg/Kg	
	CADMIUM	J	0.23	0.90	MRL	mg/Kg	
	CHROMIUM	J	23	33	MRL	mg/Kg	
	COBALT	J	7.0	19	MRL	mg/Kg	
	COPPER	J	12	26	MRL	mg/Kg	J (all detects)
	LEAD	J	9.1	31	MRL	mg/Kg	
	MOLYBDENUM	J	0.32	4.8	MRL	mg/Kg	
	NICKEL	J	14	26	MRL	mg/Kg	
	SILVER	J	0.053	0.71	MRL	mg/Kg	
	THALLIUM	J	0.26	0.42	MRL	mg/Kg	
	VANADIUM	J	39	56	MRL	mg/Kg	
	ZINC	J	63	100	MRL	mg/Kg	
SL-578-SA6-SB-0.0-0.5	ANTIMONY	J B	0.022	8.4	MRL	mg/Kg	
	ARSENIC	J	5.2	15	MRL	mg/Kg	
	BARIUM	J	74	140	MRL	mg/Kg	
	BERYLLIUM	J	0.57	1.1	MRL	mg/Kg	
	CADMIUM	J	0.19	0.97	MRL	mg/Kg	
	CHROMIUM	J	24	36	MRL	mg/Kg	
	COBALT	J	7.2	20	MRL	mg/Kg	
	COPPER	J	12	28	MRL	mg/Kg	J (all detects)
	LEAD	J	7.3	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.72	5.1	MRL	mg/Kg	
	NICKEL	J	15	28	MRL	mg/Kg	
	SILVER	J	0.050	0.77	MRL	mg/Kg	
	THALLIUM	J	0.27	0.45	MRL	mg/Kg	
	VANADIUM	J	39	60	MRL	mg/Kg	
	ZINC	J	78	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-579-SA6-SB-0.0-0.5	ANTIMONY	J B	0.023	8.3	MRL	mg/Kg	
	ARSENIC	J	6.2	14	MRL	mg/Kg	
	BARIUM	J	93	130	MRL	mg/Kg	
	BERYLLIUM	J	0.67	1.1	MRL	mg/Kg	
	CADMIUM	J	0.16	0.96	MRL	mg/Kg	
	CHROMIUM	J	25	35	MRL	mg/Kg	
	COBALT	J	7.8	20	MRL	mg/Kg	
	COPPER	J	14	28	MRL	mg/Kg	J (all detects)
	LEAD	J	6.9	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.36	5.1	MRL	mg/Kg	
	NICKEL	J	14	28	MRL	mg/Kg	
	SILVER	J	0.13	0.76	MRL	mg/Kg	
	THALLIUM	J	0.31	0.44	MRL	mg/Kg	
	VANADIUM	J	43	59	MRL	mg/Kg	
	ZINC	J	66	110	MRL	mg/Kg	
SL-579-SA6-SB-2.0-3.0	ANTIMONY	J B	0.032	8.8	MRL	mg/Kg	
	ARSENIC	J	10	15	MRL	mg/Kg	
	BARIUM	J	110	140	MRL	mg/Kg	
	CADMIUM	J	0.24	1.0	MRL	mg/Kg	
	COBALT	J	15	21	MRL	mg/Kg	
	LEAD	J	13	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.57	5.4	MRL	mg/Kg	J (all detects)
	NICKEL	J	26	29	MRL	mg/Kg	
	SILVER	J	0.069	0.80	MRL	mg/Kg	
	THALLIUM	J	0.38	0.47	MRL	mg/Kg	
	VANADIUM	J	62	63	MRL	mg/Kg	
	ZINC	J	100	110	MRL	mg/Kg	
SL-580-SA6-SB-0.0-0.5	ANTIMONY	J B	0.020	7.9	MRL	mg/Kg	
	ARSENIC	J	4.2	14	MRL	mg/Kg	
	BARIUM	J	95	130	MRL	mg/Kg	
	BERYLLIUM	J	0.57	1.0	MRL	mg/Kg	
	CADMIUM	J	0.17	0.91	MRL	mg/Kg	
	CHROMIUM	J	21	34	MRL	mg/Kg	
	COBALT	J	6.5	19	MRL	mg/Kg	
	COPPER	J	11	26	MRL	mg/Kg	J (all detects)
	LEAD	J	6.0	31	MRL	mg/Kg	
	MOLYBDENUM	J	0.29	4.8	MRL	mg/Kg	
	NICKEL	J	14	26	MRL	mg/Kg	
	SILVER	J	0.031	0.72	MRL	mg/Kg	
	THALLIUM	J	0.24	0.42	MRL	mg/Kg	
	VANADIUM	J	37	56	MRL	mg/Kg	
	ZINC	J	65	100	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-586-SA6-SB-0.0-0.5	ANTIMONY	J B	0.017	8.3	MRL	mg/Kg	
	ARSENIC	J	4.0	14	MRL	mg/Kg	
	BARIUM	J	96	130	MRL	mg/Kg	
	BERYLLIUM	J	0.61	1.0	MRL	mg/Kg	
	CADMIUM	J	0.21	0.95	MRL	mg/Kg	
	CHROMIUM	J	20	35	MRL	mg/Kg	
	COBALT	J	6.0	20	MRL	mg/Kg	
	COPPER	J	10	28	MRL	mg/Kg	J (all detects)
	LEAD	J	24	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.36	5.1	MRL	mg/Kg	
	NICKEL	J	14	28	MRL	mg/Kg	
	SILVER	J	0.060	0.75	MRL	mg/Kg	
	THALLIUM	J	0.25	0.44	MRL	mg/Kg	
	VANADIUM	J	35	59	MRL	mg/Kg	
	ZINC	J	57	100	MRL	mg/Kg	
SL-586-SA6-SB-3.5-4.5	ANTIMONY	J B	0.018	9.1	MRL	mg/Kg	
	ARSENIC	J	4.7	16	MRL	mg/Kg	
	BARIUM	J	120	150	MRL	mg/Kg	
	BERYLLIUM	J	0.88	1.2	MRL	mg/Kg	
	CADMIUM	J	0.24	1.0	MRL	mg/Kg	
	CHROMIUM	J	26	39	MRL	mg/Kg	
	COBALT	J	7.4	22	MRL	mg/Kg	
	COPPER	J	12	30	MRL	mg/Kg	J (all detects)
	LEAD	J	6.9	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	5.6	MRL	mg/Kg	
	NICKEL	J	17	30	MRL	mg/Kg	
	SILVER	J	0.057	0.83	MRL	mg/Kg	
	THALLIUM	J	0.31	0.48	MRL	mg/Kg	
	VANADIUM	J	43	65	MRL	mg/Kg	
	ZINC	J	60	120	MRL	mg/Kg	
SL-986-SA6-SB-3.5-4.5	ANTIMONY	J B	0.014	8.2	MRL	mg/Kg	
	ARSENIC	J	4.2	14	MRL	mg/Kg	
	BARIUM	J	120	130	MRL	mg/Kg	
	BERYLLIUM	J	0.69	1.0	MRL	mg/Kg	
	CADMIUM	J	0.25	0.94	MRL	mg/Kg	
	CHROMIUM	J	24	35	MRL	mg/Kg	
	COBALT	J	7.0	20	MRL	mg/Kg	
	COPPER	J	12	27	MRL	mg/Kg	J (all detects)
	LEAD	J	6.4	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	5.0	MRL	mg/Kg	
	NICKEL	J	17	27	MRL	mg/Kg	
	SILVER	J	0.049	0.75	MRL	mg/Kg	
	THALLIUM	J	0.29	0.43	MRL	mg/Kg	
	VANADIUM	J	40	59	MRL	mg/Kg	
	ZINC	J	57	100	MRL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-561-SA6-SB-0.0-0.5	MERCURY	J	0.013	0.023	MRL	mg/Kg	J (all detects)

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 7471B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-561-SA6-SB-3.5-4.5	MERCURY	J	0.011	0.024	MRL	mg/Kg	J (all detects)
SL-577-SA6-SB-0.0-0.5	MERCURY	J	0.014	0.022	MRL	mg/Kg	J (all detects)
SL-578-SA6-SB-0.0-0.5	MERCURY	J	0.0090	0.025	MRL	mg/Kg	J (all detects)
SL-579-SA6-SB-0.0-0.5	MERCURY	J	0.017	0.023	MRL	mg/Kg	J (all detects)
SL-579-SA6-SB-2.0-3.0	MERCURY	J	0.011	0.025	MRL	mg/Kg	J (all detects)
SL-580-SA6-SB-0.0-0.5	MERCURY	J	0.0063	0.023	MRL	mg/Kg	J (all detects)
SL-586-SA6-SB-0.0-0.5	MERCURY	J	0.010	0.025	MRL	mg/Kg	J (all detects)
SL-986-SA6-SB-3.5-4.5	MERCURY	J	0.0071	0.024	MRL	mg/Kg	J (all detects)

Method: 8015B EFH
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-561-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.4	5.3	MRL	mg/Kg	J (all detects)
SL-561-SA6-SB-3.5-4.5	EFH(C30-C40) TOTAL EFH(C8-C40)	J J	2.9 3.9	11 4.3	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-577-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.7	5.2	MRL	mg/Kg	J (all detects)
SL-579-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.4	5.1	MRL	mg/Kg	J (all detects)
SL-579-SA6-SB-2.0-3.0	EFH(C30-C40) TOTAL EFH(C8-C40)	J J	2.2 2.8	11 4.2	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-580-SA6-SB-0.0-0.5	EFH(C21-C30)	J	2.4	5.3	MRL	mg/Kg	J (all detects)
SL-586-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.2	5.2	MRL	mg/Kg	J (all detects)
SL-586-SA6-SB-3.5-4.5	EFH(C30-C40) TOTAL EFH(C8-C40)	J J	1.5 2.3	10 4.1	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-986-SA6-SB-3.5-4.5	EFH(C30-C40) TOTAL EFH(C8-C40)	J J	2.0 3.0	10 4.1	MRL MRL	mg/Kg mg/Kg	J (all detects)

Method: 8081B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-586-SA6-SB-0.0-0.5	ENDOSULFAN SULFATE ENDRIN KETONE	J p J p	0.35 0.54	3.5 3.5	MRL MRL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-586-SA6-SB-3.5-4.5	2,4-DB	J p	14	82	MRL	ug/Kg	J (all detects)
	MCPA	J	5000	6700	MRL	ug/Kg	
SL-986-SA6-SB-3.5-4.5	DICAMBA	J	2.8	41	MRL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-561-SA6-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.33	11	MRL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	1.0	11	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.19	11	MRL	ug/Kg	
	ANTHRACENE	J	1.9	11	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	6.2	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	5.0	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	7.2	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	3.7	11	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	2.7	11	MRL	ug/Kg	
	CHRYSENE	J	8.2	11	MRL	ug/Kg	
	FLUORENE	J	0.60	11	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	3.5	11	MRL	ug/Kg	
	NAPHTHALENE	J	0.55	11	MRL	ug/Kg	
SL-561-SA6-SB-3.5-4.5	FLUORANTHENE	J	3.3	11	MRL	ug/Kg	J (all detects)
SL-577-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.48	11	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.66	11	MRL	ug/Kg	
	ACENAPHTHENE	J	1.0	11	MRL	ug/Kg	
	ANTHRACENE	J	1.4	11	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	8.3	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	8.4	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	5.8	11	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	4.9	11	MRL	ug/Kg	
	FLUORENE	J	0.57	11	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.3	11	MRL	ug/Kg	
	NAPHTHALENE	J	1.1	11	MRL	ug/Kg	
SL-579-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.54	11	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.76	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	0.78	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.9	11	MRL	ug/Kg	
	CHRYSENE	J	2.2	11	MRL	ug/Kg	
	FLUORANTHENE	J	2.8	11	MRL	ug/Kg	
	NAPHTHALENE	J	1.3	11	MRL	ug/Kg	
	PHENANTHRENE	J	3.2	11	MRL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-1 **Laboratory: TA DEN**

EDD Filename: 280-36428-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-580-SA6-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.32	10	MRL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.2	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	3.1	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	10	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	10	MRL	ug/Kg	
	CHRYSENE	J	3.5	10	MRL	ug/Kg	
	FLUORANTHENE	J	5.3	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	10	MRL	ug/Kg	
	NAPHTHALENE	J	0.60	10	MRL	ug/Kg	
	PHENANTHRENE	J	4.4	10	MRL	ug/Kg	
	PYRENE	J	2.6	10	MRL	ug/Kg	
SL-586-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.4	51	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.8	51	MRL	ug/Kg	
	CHRYSENE	J	6.8	51	MRL	ug/Kg	
	FLUORANTHENE	J	7.9	51	MRL	ug/Kg	
	PHENANTHRENE	J	6.8	51	MRL	ug/Kg	
SL-586-SA6-SB-3.5-4.5	ANTHRACENE	J	1.7	10	MRL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	8.5	10	MRL	ug/Kg	
	BENZO(A)PYRENE	J	7.0	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	7.6	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	6.8	10	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	7.9	10	MRL	ug/Kg	
	CHRYSENE	J	9.2	10	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	6.5	10	MRL	ug/Kg	
	FLUORANTHENE	J	5.0	10	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.8	10	MRL	ug/Kg	
	PHENANTHRENE	J	1.4	10	MRL	ug/Kg	
	PYRENE	J	3.1	10	MRL	ug/Kg	
SL-986-SA6-SB-3.5-4.5	NAPHTHALENE	J	0.32	9.9	MRL	ug/Kg	J (all detects)

LDC #: 29423B4
SDG #: 280-36428-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/3/13
Page: 1 of 1
Reviewer: CL
2nd Reviewer: W

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/29/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (Al, Fe, Mn, Ti, Ba 74/x; Sb PS=100% J/UJ)
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	~~N~~ A	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Mn: 11% (J/UJ/A) (All Soil)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB= 11, 12 FB= FB-111412 (280-35930-1)

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

Validated Samples: S/W

1	SL-561-SA6-SB-0.0-0.5 2	11	EB1-112912 1 W	21		31	
2	SL-561-SA6-SB-3.5-4.5 1	12	EB2-112912 2 ↓	22		32	
3	SL-580-SA6-SB-0.0-0.5 2	13	SL-586-SA6-SB-3.5-4.5MS MS	23		33	
4	SL-579-SA6-SB-0.0-0.5 2	14	SL-586-SA6-SB-3.5-4.5MSD MSD	24		34	
5	SL-579-SA6-SB-2.0-3.0 1	15		25		35	
6	SL-586-SA6-SB-0.0-0.5 2	16		26		36	
7	SL-986-SA6-SB-3.5-4.5 1	17		27		37	
8	SL-586-SA6-SB-3.5-4.5MS 1	18		28		38	
9	SL-578-SA6-SB-0.0-0.5 2	19		29		39	
10	SL-577-SA6-SB-0.0-0.5 2	20		30		40	

Notes: _____

LDC #: 29423B4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: GR
2nd Reviewer: GR

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

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	11	12							
Na			111	0.555	0.19	0.10							
Zr			4.22	0.0211	0.0036								

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 #: 29423B4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: A
2nd Reviewer: W

METHOD: Trace Metals (EPA SW846 6010C/6020A/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/29/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / ~~Other:~~ EB Associated Samples: 2, 5, 7-8

Analyte	Blank ID	Sample Identification										
	EB1-112912	Action Limit	2									
Fe	0.88	440										
Mg	0.019	9.5										
Mn	0.0023	1.15										
Na	0.19	95										
Zr	0.0036	1.8	1.3									

Sampling date: 11/29/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / ~~Other:~~ EB Associated Samples: 1, 3-4, 6, 9-10

Analyte	Blank ID	Sample Identification										
	EB2-112912	Action Limit	No Qualifiers									
Ca	0.037	18.5										
Fe	0.67	335										
Mn	0.0016	0.8										
Na	0.10	50										

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 #: 29423B4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: A
2nd Reviewer: V

METHOD: Trace Metals (EPA SW846 6010C/6020A/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/14/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: All

Analyte	Blank ID	Sample Identification										
	FB-111412	Action Limit	1	3	4	5	6	7	8	9	10	
B	0.024	12	1.4	0.93			1.3	1.4	1.6			
Na	0.17	85		76								
Ag	0.00078	0.39	0.062	0.031	0.13	0.069	0.060	0.049	0.057	0.050	0.053	

Sampling date: _____ Soil factor applied _____
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: _____

Analyte	Blank ID	Sample Identification										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-36428-2

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Nov-2012	SL-579-SA6-SB-0.0-0.5	280-36428-11	N	1613	1613B	III
29-Nov-2012	SL-579-SA6-SB-2.0-3.0	280-36428-13	N	1613	1613B	III
29-Nov-2012	SL-565-SA6-SB-0.0-0.5	280-36428-9	N	1613	1613B	III
29-Nov-2012	SL-586-SA6-SB-0.0-0.5	280-36428-16	N	1613	1613B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5	280-36428-21	N	1613	1613B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MS	280-36428-21 MS	MS	1613	1613B	III
29-Nov-2012	SL-586-SA6-SB-3.5-4.5MSD	280-36428-21 MSD	MSD	1613	1613B	III
29-Nov-2012	SL-986-SA6-SB-3.5-4.5	280-36428-18	FD	1613	1613B	III
29-Nov-2012	SL-580-SA6-SB-0.0-0.5	280-36428-7	N	1613	1613B	III
29-Nov-2012	SL-561-SA6-SB-0.0-0.5	280-36428-2	N	1613	1613B	III
29-Nov-2012	SL-561-SA6-SB-3.5-4.5	280-36428-4	N	1613	1613B	III
29-Nov-2012	SL-578-SA6-SB-0.0-0.5	280-36428-24	N	1613	1613B	III
29-Nov-2012	SL-577-SA6-SB-0.0-0.5	280-36428-26	N	1613	1613B	III
29-Nov-2012	EB1-112912	280-36428-27	EB	1613	1613B	III
29-Nov-2012	EB2-112912	280-36428-28	EB	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix: AQ**

Sample ID: EB1-112912 *Collected:* 11/29/2012 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.45	Q B J	0.29	MDL	51	MRL	pg/L	UJ	B, I
OCDD	2.9	Q B J	0.81	MDL	100	MRL	pg/L	U	B

Sample ID: EB2-112912 *Collected:* 11/29/2012 3:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.44	Q B J	0.52	MDL	54	MRL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.41	Q J	0.40	MDL	54	MRL	pg/L	J	Z
OCDD	3.0	B J	0.61	MDL	110	MRL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-561-SA6-SB-0.0-0.5 *Collected:* 11/29/2012 1:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.3	J	0.071	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.32	Q J	0.093	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.85	J	0.072	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.33	J	0.049	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	1.6	J	0.070	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.35	J	0.051	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	2.2	J	0.067	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.063	Q J	0.064	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.34	Q J	0.11	MDL	5.2	MRL	ng/kg	J	Z
OCDF	5.4	S B J	0.077	MDL	10	MRL	ng/kg	J	Z

Sample ID: SL-561-SA6-SB-3.5-4.5 *Collected:* 11/29/2012 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.29	Q B J	0.085	MDL	5.4	MRL	ng/kg	U	B
1,2,3,4,6,7,8-HPCDF	0.13	J	0.052	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.058	Q J	0.044	MDL	5.4	MRL	ng/kg	J	Z
OCDD	4.2	B J	0.086	MDL	11	MRL	ng/kg	J	Z
OCDF	0.17	S B J	0.077	MDL	11	MRL	ng/kg	U	B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-565-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.2	Q B J	0.074	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.25	J	0.052	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.15	Q J	0.059	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.22	Q J	0.056	MDL	5.3	MRL	ng/kg	J	Z
OCDF	0.42	Q B J	0.064	MDL	11	MRL	ng/kg	U	B

Sample ID: **SL-577-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 2:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.0	J	0.065	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.66	J	0.11	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	2.0	Q J	0.065	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.48	J	0.039	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.52	Q J	0.036	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	1.0	J	0.088	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.21	B J	0.036	MDL	5.3	MRL	ng/kg	U	B
2,3,4,7,8-PECDF	0.15	Q J	0.055	MDL	5.3	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.16	Q J	0.083	MDL	1.1	MRL	ng/kg	J	Z
OCDF	4.5	B S J	0.063	MDL	11	MRL	ng/kg	J	Z

Sample ID: **SL-578-SA6-SB-0.0-0.5** ***Collected:*** **11/29/2012 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
1,2,3,4,6,7,8-HPCDF	1.9	J	0.039	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.25	Q J	0.070	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.46	J	0.055	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.12	Q J	0.024	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	1.3	J	0.057	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.12	Q J	0.023	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	1.5	J	0.053	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.30	J	0.045	MDL	5.5	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.069	Q B J	0.026	MDL	5.5	MRL	ng/kg	U	B
2,3,7,8-TCDF	0.098	Q J	0.064	MDL	1.1	MRL	ng/kg	J	Z
OCDF	1.3	Q B S J	0.050	MDL	11	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-579-SA6-SB-0.0-0.5 *Collected:* 11/29/2012 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.8	B J	0.069	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.39	Q J	0.061	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.11	Q J	0.061	MDL	5.4	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.20	J	0.054	MDL	5.4	MRL	ng/kg	J	Z
OCDF	0.51	Q B J	0.067	MDL	11	MRL	ng/kg	U	B

Sample ID: SL-579-SA6-SB-2.0-3.0 *Collected:* 11/29/2012 8:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.14	Q B J	0.10	MDL	5.3	MRL	ng/kg	U	B
1,2,3,6,7,8-HXCDD	1.2	J	0.090	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	1.0	J	0.049	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	1.3	J	0.083	MDL	5.3	MRL	ng/kg	J	Z
OCDD	1.8	B J	0.16	MDL	11	MRL	ng/kg	J	Z

Sample ID: SL-580-SA6-SB-0.0-0.5 *Collected:* 11/29/2012 12:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.67	J	0.057	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.21	Q J	0.068	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.079	J	0.048	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.42	J	0.073	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.52	J	0.066	MDL	5.2	MRL	ng/kg	J	Z
OCDF	0.87	Q S B J	0.068	MDL	10	MRL	ng/kg	J	Z

Sample ID: SL-586-SA6-SB-0.0-0.5 *Collected:* 11/29/2012 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.5	J	0.061	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.31	Q J	0.090	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.21	J	0.064	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.30	J	0.047	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.74	J	0.068	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.56	Q J	0.047	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.69	J	0.062	MDL	5.3	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-586-SA6-SB-0.0-0.5 **Collected:** 11/29/2012 9:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.10	J	0.071	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.40	J	0.085	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.12	J	0.11	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.27	Q B J	0.046	MDL	5.3	MRL	ng/kg	U	B
2,3,4,7,8-PECDF	0.30	J	0.095	MDL	5.3	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.50	Q J	0.12	MDL	1.1	MRL	ng/kg	J	Z
OCDF	3.0	S B J	0.074	MDL	11	MRL	ng/kg	J	Z

Sample ID: SL-586-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 10:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.44	B J	0.042	MDL	5.4	MRL	ng/kg	U	B
1,2,3,6,7,8-HXCDD	0.047	U	0.047	MDL	5.4	MRL	ng/kg	UJ	FD
1,2,3,7,8,9-HXCDD	0.096	J	0.042	MDL	5.4	MRL	ng/kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.040	U	0.040	MDL	5.4	MRL	ng/kg	UJ	FD
OCDD	4.5	B J	0.052	MDL	11	MRL	ng/kg	J	Z
OCDF	0.046	U	0.046	MDL	11	MRL	ng/kg	UJ	Q, FD

Sample ID: SL-986-SA6-SB-3.5-4.5 **Collected:** 11/29/2012 10:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.39	B J	0.040	MDL	5.1	MRL	ng/kg	U	B
1,2,3,6,7,8-HXCDD	0.091	J	0.045	MDL	5.1	MRL	ng/kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.041	U	0.041	MDL	5.1	MRL	ng/kg	UJ	FD
1,2,3,7,8,9-HXCDF	0.069	J	0.033	MDL	5.1	MRL	ng/kg	J	Z, FD
OCDD	4.5	B J	0.058	MDL	10	MRL	ng/kg	J	Z
OCDF	0.058	B S J	0.047	MDL	10	MRL	ng/kg	UJ	B, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
FD	Field Duplicate Precision
I	Internal Standard Estimation
Q	Matrix Spike Lower Estimation
Z	Reporting Limit Trace Value

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36428-2/
H2L040406

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2L060000012B	12/17/2012 11:07:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,6,7,8-HXCDF 2,3,4,6,7,8-HXCDF OCDD OCDF	1.2 pg/L 0.62 pg/L 0.73 pg/L 3.8 pg/L 2.1 pg/L	EB1-112912 EB2-112912

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-112912(RES)	2,3,4,6,7,8-HXCDF	0.45 pg/L	0.45U pg/L
EB1-112912(RES)	OCDD	2.9 pg/L	2.9U pg/L
EB2-112912(RES)	1,2,3,4,6,7,8-HPCDD	0.44 pg/L	0.44U pg/L
EB2-112912(RES)	OCDD	3.0 pg/L	3.0U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2L050000024B	12/14/2012 12:48:00 PM	1,2,3,4,6,7,8-HPCDD 2,3,4,6,7,8-HXCDF OCDD OCDF	0.11 ng/kg 0.071 ng/kg 0.28 ng/kg 0.13 ng/kg	SL-561-SA6-SB-0.0-0.5 SL-561-SA6-SB-3.5-4.5 SL-565-SA6-SB-0.0-0.5 SL-577-SA6-SB-0.0-0.5 SL-578-SA6-SB-0.0-0.5 SL-579-SA6-SB-0.0-0.5 SL-579-SA6-SB-2.0-3.0 SL-580-SA6-SB-0.0-0.5 SL-586-SA6-SB-0.0-0.5 SL-586-SA6-SB-3.5-4.5 SL-986-SA6-SB-3.5-4.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-561-SA6-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDD	0.29 ng/kg	0.29U ng/kg
SL-561-SA6-SB-3.5-4.5(RES)	OCDF	0.17 ng/kg	0.17U ng/kg
SL-565-SA6-SB-0.0-0.5(RES)	OCDF	0.42 ng/kg	0.42U ng/kg
SL-577-SA6-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.21 ng/kg	0.21U ng/kg
SL-578-SA6-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.069 ng/kg	0.069U ng/kg
SL-579-SA6-SB-0.0-0.5(RES)	OCDF	0.51 ng/kg	0.51U ng/kg
SL-579-SA6-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.14 ng/kg	0.14U ng/kg
SL-586-SA6-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.27 ng/kg	0.27U ng/kg
SL-586-SA6-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDD	0.44 ng/kg	0.44U ng/kg
SL-986-SA6-SB-3.5-4.5(RES)	1,2,3,4,6,7,8-HPCDD	0.39 ng/kg	0.39U ng/kg
SL-986-SA6-SB-3.5-4.5(RES)	OCDF	0.058 ng/kg	0.058U ng/kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-586-SA6-SB-3.5-4.5MS **SL-586-SA6-SB-3.5-4.5MSD** (SL-586-SA6-SB-3.5-4.5)	OCDF	39	34	40.00-135.00	-	OCDF	J (all detects) UJ (all non-detects)

TestAmerica Denver

Client Sample ID: EB1-112912

Dioxins/Furans, HRGC/HRMS (1613B)

Lot - Sample #....:	H2L040406 - 012	Work Order #....:	MXGMV1AA	Matrix.....:	WQ
Date Sampled....:	11/29/12	Date Received....:	11/30/12	Units....:	pg/L
Prep Date....:	12/06/12			Dilution Factor:	1
Prep Batch # ....:	2341012				
Initial Wgt/Vol :	987 mL	Instrument ID....:	M2A	Method....:	EPA-5 1613B
Analyst ID....:	Kathryn B. Lay				

PARAMETER	ANALYSIS DATE	DILUTION FACTOR	RESULT	MINIMUM LEVEL	ESTIMATED DETECTION LIMIT	WHO 2005 TEF FACTOR	TEQ CONC.
2,3,7,8-TCDD	12/18/12	1	ND	10	1.0	1.0	0
1,2,3,7,8-PeCDD	12/18/12	1	ND	51	0.62	1.0	0
1,2,3,4,7,8-HxCDD	12/18/12	1	ND	51	0.53	0.1	0
1,2,3,6,7,8-HxCDD	12/18/12	1	ND	51	0.55	0.1	0
1,2,3,7,8,9-HxCDD	12/18/12	1	ND	51	0.51	0.1	0
1,2,3,4,6,7,8-HpCDD	12/18/12	1	ND	51	0.67	0.01	0
OCDD	**12/18/12**	**1**	**2.9 Q B J**	**100**	**0.81**	**0.0003**	**0.00087**
2,3,7,8-TCDF	12/18/12	1	ND	10	0.66	0.1	0
1,2,3,7,8-PeCDF	12/18/12	1	ND	51	0.55	0.03	0
2,3,4,7,8-PeCDF	12/18/12	1	ND	51	0.42	0.3	0
1,2,3,4,7,8-HxCDF	12/18/12	1	ND	51	0.37	0.1	0
1,2,3,6,7,8-HxCDF	12/18/12	1	ND	51	0.34	0.1	0
2,3,4,6,7,8-HxCDF	**12/18/12**	**1**	**0.45 Q B J**	**51**	**0.29**	**0.1**	**0.045**
1,2,3,7,8,9-HxCDF	12/18/12	1	ND	51	0.49	0.1	0
1,2,3,4,6,7,8-HpCDF	12/18/12	1	ND	51	0.49	0.01	0
1,2,3,4,7,8,9-HpCDF	12/18/12	1	ND	51	0.73	0.01	0
OCDF	12/18/12	1	ND	100	0.60	0.0003	0
Total TEQ Concentration							**0.046**

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	(25 - 164)
13C-1,2,3,7,8-PeCDD	98	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	162 *	(32 - 141) Jdet/P*
13C-1,2,3,6,7,8-HxCDD	132 *	(28 - 130) Jdet/P*
13C-1,2,3,4,6,7,8-HpCDD	146 *	(23 - 140) Jdet/P
13C-OCDD	133	(17 - 157)
13C-2,3,7,8-TCDF	84	(24 - 169)
13C-1,2,3,7,8-PeCDF	79	(24 - 185)
13C-2,3,4,7,8-PeCDF	90	(21 - 178)
13C-1,2,3,4,7,8-HxCDF	128	(26 - 152)
13C-1,2,3,6,7,8-HxCDF	123	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	149 *	(28 - 136) Jdet/P
13C-1,2,3,7,8,9-HxCDF	109	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	117	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	121	(26 - 138)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS

* Applies to 1,2,3,7,8,9-HxCDD

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: SO

Analyte	*Concentration (ng/kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-586-SA6-SB-3.5-4.5	SL-986-SA6-SB-3.5-4.5			
1,2,3,4,6,7,8-HPCDD	0.44	0.39	12	50.00	No Qualifiers Applied
OCDD	4.5	4.5	0	50.00	
1,2,3,6,7,8-HXCDD	5.4 U	0.091	200	50.00	
1,2,3,7,8,9-HXCDD	0.096	5.1 U	200	50.00	J(all detects)
1,2,3,7,8,9-HXCDF	5.4 U	0.069	200	50.00	UJ(all non-detects)
OCDF	11 U	0.058	200	50.00	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-112912	2,3,4,6,7,8-HXCDF	Q B J	0.45	51	MRL	pg/L	J (all detects)
	OCDD	Q B J	2.9	100	MRL	pg/L	
EB2-112912	1,2,3,4,6,7,8-HPCDD	Q B J	0.44	54	MRL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	Q J	0.41	54	MRL	pg/L	
	OCDD	B J	3.0	110	MRL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-561-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	3.3	5.2	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	Q J	0.32	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.85	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.33	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	1.6	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	0.35	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	2.2	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.063	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.34	5.2	MRL	ng/kg	
	OCDF	S B J	5.4	10	MRL	ng/kg	
SL-561-SA6-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	Q B J	0.29	5.4	MRL	ng/kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	J	0.13	5.4	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.058	5.4	MRL	ng/kg	
	OCDD	B J	4.2	11	MRL	ng/kg	
	OCDF	S B J	0.17	11	MRL	ng/kg	
SL-565-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	Q B J	3.2	5.3	MRL	ng/kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	J	0.25	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	Q J	0.15	5.3	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	Q J	0.22	5.3	MRL	ng/kg	
	OCDF	Q B J	0.42	11	MRL	ng/kg	
SL-577-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	5.0	5.3	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	J	0.66	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	2.0	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.48	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.52	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDD	J	1.0	5.3	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	B J	0.21	5.3	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.15	5.3	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.16	1.1	MRL	ng/kg	
	OCDF	B S J	4.5	11	MRL	ng/kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36428-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36428-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-578-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	1.9	5.5	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	Q J	0.25	5.5	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.46	5.5	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.12	5.5	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	1.3	5.5	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.12	5.5	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDD	J	1.5	5.5	MRL	ng/kg	
	1,2,3,7,8-PECDD	J	0.30	5.5	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q B J	0.069	5.5	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.098	1.1	MRL	ng/kg	
	OCDF	Q B S	1.3	11	MRL	ng/kg	
		J					
SL-579-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	B J	2.8	5.4	MRL	ng/kg	
	1,2,3,4,6,7,8-HPCDF	Q J	0.39	5.4	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	Q J	0.11	5.4	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDD	J	0.20	5.4	MRL	ng/kg	
	OCDF	Q B J	0.51	11	MRL	ng/kg	
SL-579-SA6-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	Q B J	0.14	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	1.2	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	1.0	5.3	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDD	J	1.3	5.3	MRL	ng/kg	
	OCDD	B J	1.8	11	MRL	ng/kg	
SL-580-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	0.67	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.21	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.079	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.42	5.2	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDD	J	0.52	5.2	MRL	ng/kg	
	OCDF	Q S B	0.87	10	MRL	ng/kg	
		J					
SL-586-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	2.5	5.3	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	Q J	0.31	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	0.21	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.30	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.74	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.56	5.3	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.69	5.3	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	J	0.10	5.3	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.40	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDF	J	0.12	5.3	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q B J	0.27	5.3	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.30	5.3	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.50	1.1	MRL	ng/kg	
	OCDF	S B J	3.0	11	MRL	ng/kg	
SL-586-SA6-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	B J	0.44	5.4	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.096	5.4	MRL	ng/kg	J (all detects)
	OCDD	B J	4.5	11	MRL	ng/kg	
SL-986-SA6-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	B J	0.39	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.091	5.1	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	J	0.069	5.1	MRL	ng/kg	J (all detects)
	OCDD	B J	4.5	10	MRL	ng/kg	
	OCDF	B S J	0.058	10	MRL	ng/kg	

SAMPLE DELIVERY GROUP

280-36452-1

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
30-Nov-2012	TB-113012	280-36452-1	TB	METHOD	8015B GRO	III
30-Nov-2012	SL-573-SA6-SB-0.0-0.5	280-36452-2	N	3546	8270C SIM	III
30-Nov-2012	SL-573-SA6-SB-0.0-0.5	280-36452-2	N	3550C	8015B EFH	III
30-Nov-2012	SL-573-SA6-SB-0.0-0.5	280-36452-3	N	3050B	6010C	III
30-Nov-2012	SL-573-SA6-SB-0.0-0.5	280-36452-3	N	3050B	6020A	III
30-Nov-2012	SL-573-SA6-SB-0.0-0.5	280-36452-3	N	3546	8082A	III
30-Nov-2012	SL-573-SA6-SB-0.0-0.5	280-36452-3	N	7471B	7471B	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0	280-36452-4	N	3546	8270C SIM	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0	280-36452-4	N	3550C	8015B EFH	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MS	280-36452-4MS	MS	3546	8270C SIM	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MS	280-36452-4MS	MS	3550C	8015B EFH	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MSD	280-36452-4MSD	MSD	3546	8270C SIM	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MSD	280-36452-4MSD	MSD	3550C	8015B EFH	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0	280-36452-5	N	3050B	6010C	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0	280-36452-5	N	3050B	6020A	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0	280-36452-5	N	3546	8082A	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0	280-36452-5	N	7471B	7471B	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MS	280-36452-5MS	MS	3050B	6010C	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MS	280-36452-5MS	MS	3050B	6020A	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MS	280-36452-5MS	MS	3546	8082A	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MS	280-36452-5MS	MS	7471B	7471B	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MSD	280-36452-5MSD	MSD	3050B	6010C	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MSD	280-36452-5MSD	MSD	3050B	6020A	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MSD	280-36452-5MSD	MSD	3546	8082A	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MSD	280-36452-5MSD	MSD	7471B	7471B	III
30-Nov-2012	SL-573-SA6-SB-3.5	280-36452-6	N	5035	8015B GRO	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
30-Nov-2012	SL-573-SA6-SB-3.5MS	280-36452-6MS	MS	5035	8015B GRO	III
30-Nov-2012	SL-573-SA6-SB-3.5MSD	280-36452-6MSD	MSD	5035	8015B GRO	III
30-Nov-2012	SL-973-SA6-SB-3.0-4.0	280-36452-7	FD	3546	8270C SIM	III
30-Nov-2012	SL-973-SA6-SB-3.0-4.0	280-36452-7	FD	3550C	8015B EFH	III
30-Nov-2012	SL-973-SA6-SB-3.0-4.0	280-36452-8	FD	3050B	6010C	III
30-Nov-2012	SL-973-SA6-SB-3.0-4.0	280-36452-8	FD	3050B	6020A	III
30-Nov-2012	SL-973-SA6-SB-3.0-4.0	280-36452-8	FD	3546	8082A	III
30-Nov-2012	SL-973-SA6-SB-3.0-4.0	280-36452-8	FD	7471B	7471B	III
30-Nov-2012	SL-973-SA6-SB-3.5	280-36452-9	FD	5035	8015B GRO	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-573-SA6-SB-0.0-0.5 **Collected:** 11/30/2012 9:15:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.4	J	0.34	MDL	8.2	MRL	mg/Kg	U	B

Sample ID: SL-573-SA6-SB-0.0-0.5 **Collected:** 11/30/2012 9:15:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	2.0	J	0.94	MDL	9.3	MRL	mg/Kg	U	F
LITHIUM	24	J	0.29	MDL	35	MRL	mg/Kg	J	Z
MANGANESE	300	J	0.096	MDL	470	MRL	mg/Kg	J	Z
POTASSIUM	4200	J	39	MDL	6100	MRL	mg/Kg	J	Z
SODIUM	90	J	57	MDL	480	MRL	mg/Kg	J	Z
TIN	1.2	J B	0.87	MDL	10	MRL	mg/Kg	U	B

Sample ID: SL-573-SA6-SB-3.0-4.0 **Collected:** 11/30/2012 9:30:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.6	J	0.36	MDL	8.8	MRL	mg/Kg	U	B, F

Sample ID: SL-573-SA6-SB-3.0-4.0 **Collected:** 11/30/2012 9:30:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.7	J	1.0	MDL	9.9	MRL	mg/Kg	U	F
LITHIUM	22	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	310	J	0.10	MDL	500	MRL	mg/Kg	J	Z
POTASSIUM	3200	J	42	MDL	6500	MRL	mg/Kg	J	Z
SODIUM	130	J	60	MDL	510	MRL	mg/Kg	J	Z
TIN	1.1	J B	0.93	MDL	11	MRL	mg/Kg	U	B

Sample ID: SL-973-SA6-SB-3.0-4.0 **Collected:** 11/30/2012 9:40:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.8	J	0.36	MDL	8.8	MRL	mg/Kg	U	F

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-973-SA6-SB-3.0-4.0 *Collected:* 11/30/2012 9:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.7	J	1.0	MDL	9.9	MRL	mg/Kg	U	F
LITHIUM	21	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	310	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	3300	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	120	J	60	MDL	510	MRL	mg/Kg	J	Z
TIN	1.1	J B	0.93	MDL	11	MRL	mg/Kg	U	B

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-573-SA6-SB-0.0-0.5 *Collected:* 11/30/2012 9:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.029	J	0.013	MDL	8.3	MRL	mg/Kg	J	Z, Q
ARSENIC	3.4	J	0.049	MDL	14	MRL	mg/Kg	J	Z
BARIUM	100	J	0.068	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.47	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.23	J	0.0090	MDL	0.96	MRL	mg/Kg	J	Z
CHROMIUM	17	J	0.073	MDL	35	MRL	mg/Kg	J	Z
COBALT	5.7	J	0.0064	MDL	20	MRL	mg/Kg	J	Z
COPPER	8.7	J	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	5.8	J	0.017	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.40	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.024	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.038	J	0.019	MDL	0.76	MRL	mg/Kg	U	F
THALLIUM	0.27	J	0.0034	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	31	J	0.037	MDL	59	MRL	mg/Kg	J	Z
ZINC	62	J	0.30	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-573-SA6-SB-3.0-4.0 *Collected:* 11/30/2012 9:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.020	J	0.014	MDL	8.9	MRL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-573-SA6-SB-3.0-4.0 *Collected:* 11/30/2012 9:30:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	2.9	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	99	J	0.072	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.54	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.25	J	0.0096	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	17	J	0.078	MDL	38	MRL	mg/Kg	J	Z
COBALT	5.6	J	0.0068	MDL	22	MRL	mg/Kg	J	Z
COPPER	8.9	J	0.073	MDL	30	MRL	mg/Kg	J	Z
LEAD	4.5	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.43	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	12	J B	0.026	MDL	30	MRL	mg/Kg	J	Z
SELENIUM	0.66	J	0.14	MDL	0.67	MRL	mg/Kg	J	Z
SILVER	0.036	J	0.021	MDL	0.81	MRL	mg/Kg	U	F
THALLIUM	0.27	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	31	J	0.040	MDL	64	MRL	mg/Kg	J	Z
ZINC	51	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-973-SA6-SB-3.0-4.0 *Collected:* 11/30/2012 9:40:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.020	J	0.013	MDL	8.1	MRL	mg/Kg	J	Z, Q
ARSENIC	2.9	J	0.047	MDL	14	MRL	mg/Kg	J	Z
BARIUM	90	J	0.066	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.46	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.24	J	0.0087	MDL	0.93	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.071	MDL	34	MRL	mg/Kg	J	Z
COBALT	5.4	J	0.0062	MDL	20	MRL	mg/Kg	J	Z
COPPER	8.2	J	0.066	MDL	27	MRL	mg/Kg	J	Z
LEAD	4.3	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.41	J	0.016	MDL	4.9	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.024	MDL	27	MRL	mg/Kg	J	Z
SILVER	0.030	J	0.019	MDL	0.74	MRL	mg/Kg	U	F
THALLIUM	0.27	J	0.0033	MDL	0.43	MRL	mg/Kg	J	Z
VANADIUM	30	J	0.036	MDL	58	MRL	mg/Kg	J	Z
ZINC	51	J	0.29	MDL	100	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-573-SA6-SB-0.0-0.5 *Collected:* 11/30/2012 9:15:00 *Analysis Type:* RES/TOT *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.014	J	0.0068	MDL	0.025	MRL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-573-SA6-SB-0.0-0.5 *Collected:* 11/30/2012 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	2.5	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z

Sample ID: SL-573-SA6-SB-3.0-4.0 *Collected:* 11/30/2012 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	2.2	J B	0.68	MDL	4.0	MRL	mg/Kg	U	B

Sample ID: SL-973-SA6-SB-3.0-4.0 *Collected:* 11/30/2012 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
TOTAL EFH(C8-C40)	1.7	J B	0.68	MDL	4.0	MRL	mg/Kg	U	B

Method Category: SVOA

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

Sample ID: SL-573-SA6-SB-0.0-0.5 *Collected:* 11/30/2012 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.34	J	0.33	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	1.5	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	1.1	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	0.64	J	0.35	MDL	11	MRL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	1.2	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Sample ID: SL-573-SA6-SB-3.0-4.0 *Collected:* 11/30/2012 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.33	U	0.33	MDL	10	MRL	ug/Kg	UJ	FD

Sample ID: SL-973-SA6-SB-3.0-4.0 *Collected:* 11/30/2012 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
NAPHTHALENE	0.34	J	0.33	MDL	10	MRL	ug/Kg	J	Z, FD

Method Category: SVOA
Method: BaP EQUIVALENCE **Matrix:** SO

Sample ID: SL-573-SA6-SB-0.0-0.5 *Collected:* 11/30/2012 9:15:00 *Analysis Type:* RES/WET *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BAP EQUIVALENCE	0.0015	J	0.00074	MDL	0.0050	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Calibration Blank Contamination
B	Method Blank Contamination
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36452-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: 280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150486/1-A	12/6/2012 11:01:00 AM	IRON TIN	8.41 mg/Kg 0.943 mg/Kg	SL-573-SA6-SB-0.0-0.5 SL-573-SA6-SB-3.0-4.0 SL-973-SA6-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-573-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.2 mg/Kg	1.2U mg/Kg
SL-573-SA6-SB-3.0-4.0(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg
SL-973-SA6-SB-3.0-4.0(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg

Method: 6020A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150488/1-A	12/5/2012 9:55:00 PM	NICKEL	0.0701 mg/Kg	SL-573-SA6-SB-0.0-0.5 SL-573-SA6-SB-3.0-4.0 SL-973-SA6-SB-3.0-4.0

Method: 8015B EFH
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150232/1-A	12/5/2012 10:09:00 PM	TOTAL EFH(C8-C40)	0.947 mg/Kg	SL-573-SA6-SB-0.0-0.5 SL-573-SA6-SB-3.0-4.0 SL-973-SA6-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-573-SA6-SB-3.0-4.0(RES)	TOTAL EFH(C8-C40)	2.2 mg/Kg	4.0U mg/Kg
SL-973-SA6-SB-3.0-4.0(RES)	TOTAL EFH(C8-C40)	1.7 mg/Kg	4.0U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: 280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8015B EFH
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-573-SA6-SB-3.0-4.0MSD (SL-573-SA6-SB-3.0-4.0)	EFH(C21-C30)	-	136	55.00-115.00	-	EFH(C21-C30)	J (all detects)

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-573-SA6-SB-3.0-4.0MS (TOT)	ALUMINUM	2104	1892	75.00-125.00	-	ALUMINUM	
	IRON	903	-	75.00-125.00	-	IRON	
SL-573-SA6-SB-3.0-4.0MSD (TOT)	MANGANESE	134	-	75.00-125.00	-	MANGANESE	
(SL-573-SA6-SB-0.0-0.5 SL -573-SA6-SB-3.0-4.0 SL -973-SA6-SB-3.0-4.0)	TITANIUM	236	194	75.00-125.00	-	TITANIUM	No Qual, >4x

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-573-SA6-SB-3.0-4.0MS (TOT) SL-573-SA6-SB-3.0-4.0MSD (TOT) (SL-573-SA6-SB-0.0-0.5 SL -573-SA6-SB-3.0-4.0 SL -973-SA6-SB-3.0-4.0)	ANTIMONY	7	7	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike = 102%

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: 280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Analyte	Concentration (mg/Kg) SL-573-SA6-SB-3.0-4.0 (TOT)	Concentration (mg/Kg) SL-973-SA6-SB-3.0-4.0 (TOT)	Sample RPD	eQAPP RPD	Flag
ALUMINUM	14000	13000	7	50.00	No Qualifiers Applied
BORON	1.7	1.7	0	50.00	
CALCIUM	1900	2100	10	50.00	
IRON	17000	17000	0	50.00	
LITHIUM	22	21	5	50.00	
MAGNESIUM	4200	4200	0	50.00	
MANGANESE	310	310	0	50.00	
PHOSPHORUS	290	300	3	50.00	
POTASSIUM	3200	3300	3	50.00	
SODIUM	130	120	8	50.00	
STRONTIUM	17	16	6	50.00	
TIN	1.1	1.1	0	50.00	
TITANIUM	960	1000	4	50.00	
Zirconium	1.6	1.8	12	50.00	

Method: 6020A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-573-SA6-SB-3.0-4.0 (TOT)	Concentration (mg/Kg) SL-973-SA6-SB-3.0-4.0 (TOT)	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.020	0.020	0	50.00	No Qualifiers Applied
ARSENIC	2.9	2.9	0	50.00	
BARIUM	99	90	10	50.00	
BERYLLIUM	0.54	0.46	16	50.00	
CADMIUM	0.25	0.24	4	50.00	
CHROMIUM	17	16	6	50.00	
COBALT	5.6	5.4	4	50.00	
COPPER	8.9	8.2	8	50.00	
LEAD	4.5	4.3	5	50.00	
MOLYBDENUM	0.43	0.41	5	50.00	
NICKEL	12	11	9	50.00	
SELENIUM	0.66	0.66	0	50.00	
SILVER	0.036	0.030	18	50.00	
THALLIUM	0.27	0.27	0	50.00	
VANADIUM	31	30	3	50.00	
ZINC	51	51	0	50.00	

Method: 8015B EFH
Matrix: SO

Analyte	Concentration (mg/Kg) SL-573-SA6-SB-3.0-4.0	Concentration (mg/Kg) SL-973-SA6-SB-3.0-4.0	Sample RPD	eQAPP RPD	Flag
TOTAL EFH(C8-C40)	2.2	1.7	26	50.00	No Qualifiers Applied

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-573-SA6-SB-3.0-4.0	Concentration (ug/Kg) SL-973-SA6-SB-3.0-4.0	Sample RPD	eQAPP RPD	Flag
NAPHTHALENE	10 U	0.34	200	50.00	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: 280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 9045D
Matrix: SO

Analyte	*Concentration (pH unit)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-573-SA6-SB-3.0-4.0	SL-973-SA6-SB-3.0-4.0			
PH	7.24	7.06	3		No Qualifiers Applied
TEMPERATURE	21.5	21.5	0		

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: 280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-573-SA6-SB-0.0-0.5	ALUMINUM	J	12000	19000	MRL	mg/Kg	
	BORON	J	2.0	9.3	MRL	mg/Kg	
	LITHIUM	J	24	35	MRL	mg/Kg	
	MANGANESE	J	300	470	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	4200	6100	MRL	mg/Kg	
	SODIUM	J	90	480	MRL	mg/Kg	
	TIN	J B	1.2	10	MRL	mg/Kg	
	Zirconium	J	1.4	8.2	MRL	mg/Kg	
SL-573-SA6-SB-3.0-4.0	ALUMINUM	J	14000	20000	MRL	mg/Kg	
	BORON	J	1.7	9.9	MRL	mg/Kg	
	LITHIUM	J	22	38	MRL	mg/Kg	
	MANGANESE	J	310	500	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3200	6500	MRL	mg/Kg	
	SODIUM	J	130	510	MRL	mg/Kg	
	TIN	J B	1.1	11	MRL	mg/Kg	
	Zirconium	J	1.6	8.8	MRL	mg/Kg	
SL-973-SA6-SB-3.0-4.0	ALUMINUM	J	13000	20000	MRL	mg/Kg	
	BORON	J	1.7	9.9	MRL	mg/Kg	
	LITHIUM	J	21	38	MRL	mg/Kg	
	MANGANESE	J	310	510	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3300	6600	MRL	mg/Kg	
	SODIUM	J	120	510	MRL	mg/Kg	
	TIN	J B	1.1	11	MRL	mg/Kg	
	Zirconium	J	1.8	8.8	MRL	mg/Kg	

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-573-SA6-SB-0.0-0.5	ANTIMONY	J	0.029	8.3	MRL	mg/Kg	
	ARSENIC	J	3.4	14	MRL	mg/Kg	
	BARIUM	J	100	130	MRL	mg/Kg	
	BERYLLIUM	J	0.47	1.1	MRL	mg/Kg	
	CADMIUM	J	0.23	0.96	MRL	mg/Kg	
	CHROMIUM	J	17	35	MRL	mg/Kg	
	COBALT	J	5.7	20	MRL	mg/Kg	
	COPPER	J	8.7	28	MRL	mg/Kg	J (all detects)
	LEAD	J	5.8	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.40	5.1	MRL	mg/Kg	
	NICKEL	J B	11	28	MRL	mg/Kg	
	SILVER	J	0.038	0.76	MRL	mg/Kg	
	THALLIUM	J	0.27	0.44	MRL	mg/Kg	
	VANADIUM	J	31	59	MRL	mg/Kg	
	ZINC	J	62	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: 280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-573-SA6-SB-3.0-4.0	ANTIMONY	J	0.020	8.9	MRL	mg/Kg	
	ARSENIC	J	2.9	15	MRL	mg/Kg	
	BARIUM	J	99	140	MRL	mg/Kg	
	BERYLLIUM	J	0.54	1.1	MRL	mg/Kg	
	CADMIUM	J	0.25	1.0	MRL	mg/Kg	
	CHROMIUM	J	17	38	MRL	mg/Kg	
	COBALT	J	5.6	22	MRL	mg/Kg	
	COPPER	J	8.9	30	MRL	mg/Kg	J (all detects)
	LEAD	J	4.5	35	MRL	mg/Kg	
	MOLYBDENUM	J	0.43	5.4	MRL	mg/Kg	
	NICKEL	J B	12	30	MRL	mg/Kg	
	SELENIUM	J	0.66	0.67	MRL	mg/Kg	
	SILVER	J	0.036	0.81	MRL	mg/Kg	
	THALLIUM	J	0.27	0.47	MRL	mg/Kg	
	VANADIUM	J	31	64	MRL	mg/Kg	
	ZINC	J	51	110	MRL	mg/Kg	
SL-973-SA6-SB-3.0-4.0	ANTIMONY	J	0.020	8.1	MRL	mg/Kg	
	ARSENIC	J	2.9	14	MRL	mg/Kg	
	BARIUM	J	90	130	MRL	mg/Kg	
	BERYLLIUM	J	0.46	1.0	MRL	mg/Kg	
	CADMIUM	J	0.24	0.93	MRL	mg/Kg	
	CHROMIUM	J	16	34	MRL	mg/Kg	
	COBALT	J	5.4	20	MRL	mg/Kg	
	COPPER	J	8.2	27	MRL	mg/Kg	J (all detects)
	LEAD	J	4.3	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.41	4.9	MRL	mg/Kg	
	NICKEL	J B	11	27	MRL	mg/Kg	
	SILVER	J	0.030	0.74	MRL	mg/Kg	
	THALLIUM	J	0.27	0.43	MRL	mg/Kg	
	VANADIUM	J	30	58	MRL	mg/Kg	
	ZINC	J	51	100	MRL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-573-SA6-SB-0.0-0.5	MERCURY	J	0.014	0.025	MRL	mg/Kg	J (all detects)

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-573-SA6-SB-0.0-0.5	EFH(C15-C20)	J	2.5	5.4	MRL	mg/Kg	J (all detects)
SL-573-SA6-SB-3.0-4.0	TOTAL EFH(C8-C40)	J B	2.2	4.0	MRL	mg/Kg	J (all detects)
SL-973-SA6-SB-3.0-4.0	TOTAL EFH(C8-C40)	J B	1.7	4.0	MRL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36452-1 **Laboratory: TA DEN**

EDD Filename: 280-36452-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-573-SA6-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.34	11	MRL	ug/Kg	
	CHRYSENE	J	1.5	11	MRL	ug/Kg	
	FLUORANTHENE	J	1.7	11	MRL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.64	11	MRL	ug/Kg	
	PHENANTHRENE	J	1.5	11	MRL	ug/Kg	
SL-973-SA6-SB-3.0-4.0	NAPHTHALENE	J	0.34	10	MRL	ug/Kg	J (all detects)

Method: BaP EQUIVALENCE

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-573-SA6-SB-0.0-0.5	BAP EQUIVALENCE	J	0.0015	0.0050	MRL	ug/Kg	J (all detects)

LDC #: 29423D4
SDG #: 280-36452-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/3/13
Page: 1 of 1
Reviewer: AL
2nd Reviewer: W

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 11/30/12
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	(Al, Fe, Mn, Ti, ~~Ba~~ >4x; Sb MS = 102% (J/UJ))
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	~~N~~ A	
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	—	2 + 3
XV	Field Blanks	SW	EB = EB1-112912 (280-36428-1) EB = EB2-112912 FB = FB-111412 (280-35930-1)

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

Validated Samples:

1	SL-573-SA6-SB-0.0-0.5	11		21		31	
2	SL-573-SA6-SB-3.0-4.0MS	12		22		32	
3	SL-973-SA6-SB-3.0-4.0	13		23		33	
4	SL-573-SA6-SB-3.0-4.0MSMS	14		24		34	
5	SL-573-SA6-SB-3.0-4.0MSMSD	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 #: 29423D4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: A
2nd Reviewer: M

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x Reason: B
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Action Level	1	2							
Zr			3.24	1.62	1.4	1.6							

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 29423D4

VALIDATION FINDINGS WORKSHEET
Field Blanks

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

METHOD: Trace Metals (EPA SW846 6010C/6020A/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/29/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 2-3

Analyte	Blank ID	Sample Identification										
	EB1-112912	Action Limit	2	3								
Fe	0.88	440										
Mg	0.019	9.5										
Mn	0.0023	1.15										
Na	0.19	95										
Zr	0.0036	1.8	1.6	1.8								

Sampling date: 11/29/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 1

Analyte	Blank ID	Sample Identification										
	EB2-112912	Action Limit	No Qualifiers									
Ca	0.037	18.5										
Fe	0.67	335										
Mn	0.0016	0.8										
Na	0.10	50										

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 #: 29423D4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: A
2nd Reviewer: V

METHOD: Trace Metals (EPA SW846 6010C/6020A/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/14/12 Soil factor applied 100x
Field blank type: (circle one) ~~Field Blank~~ / Rinsate / Other: _____ Associated Samples: All

Analyte	Blank ID	Sample Identification										
	FB-111412	Action Limit	1	2	3							
B	0.024	12	2.0	1.7	1.7							
Na	0.17	85										
Ag	0.00078	0.39	0.038	0.036	0.030							

Sampling date: _____ Soil factor applied _____
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: _____

Analyte	Blank ID	Sample Identification										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-36452-2

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
30-Nov-2012	SL-573-SA6-SB-0.0-0.5	280-36452-3	N	1613	1613B	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0	280-36452-5	N	1613	1613B	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MS	280-36452-5 MS	MS	1613	1613B	III
30-Nov-2012	SL-573-SA6-SB-3.0-4.0MSD	280-36452-5 MSD	MSD	1613	1613B	III
30-Nov-2012	SL-973-SA6-SB-3.0-4.0	280-36452-8	FD	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-573-SA6-SB-0.0-0.5** ***Collected:*** **11/30/2012 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.5	J	0.063	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.69	Q J	0.10	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	4.2	J	0.063	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.40	Q J	0.033	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.39	Q J	0.034	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.15	Q J	0.048	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	1.8	J	0.073	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.13	Q J	0.051	MDL	5.7	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.13	Q B J	0.033	MDL	5.7	MRL	ng/kg	U	B
2,3,7,8-TCDD	0.24	Q J	0.11	MDL	1.1	MRL	ng/kg	J	Z
OCDF	3.9	S B J	0.054	MDL	11	MRL	ng/kg	J	Z

Sample ID: **SL-573-SA6-SB-3.0-4.0** ***Collected:*** **11/30/2012 9:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.8	Q B J	0.043	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.086	Q J	0.045	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.34	J	0.053	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.039	Q J	0.026	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.53	Q J	0.049	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.17	S Q J	0.050	MDL	5.2	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.051	Q J	0.085	MDL	1.0	MRL	ng/kg	J	Z, FD
OCDD	16	B	0.063	MDL	10	MRL	ng/kg	J	FD

Sample ID: **SL-973-SA6-SB-3.0-4.0** ***Collected:*** **11/30/2012 9:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.56	B J	0.12	MDL	5.1	MRL	ng/kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.15	Q J	0.10	MDL	5.1	MRL	ng/kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.30	J	0.11	MDL	5.1	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.063	U	0.063	MDL	5.1	MRL	ng/kg	UJ	FD
1,2,3,7,8,9-HXCDD	0.52	J	0.10	MDL	5.1	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-973-SA6-SB-3.0-4.0** ***Collected:*** **11/30/2012 9:40:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,3,7,8,9-HXCDF	0.25	Q J	0.090	MDL	5.1	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.16	U	0.16	MDL	1.0	MRL	ng/kg	UJ	FD
OCDD	3.9	B J	0.12	MDL	10	MRL	ng/kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36452-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-2 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
FD	Field Duplicate Precision
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36452-2/
H2L050405

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36452-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2L050000024B	12/14/2012 12:48:00 PM	1,2,3,4,6,7,8-HPCDD 2,3,4,6,7,8-HXCDF OCDD OCDF	0.11 ng/kg 0.071 ng/kg 0.28 ng/kg 0.13 ng/kg	SL-573-SA6-SB-0.0-0.5 SL-573-SA6-SB-3.0-4.0 SL-973-SA6-SB-3.0-4.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-573-SA6-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.13 ng/kg	0.13U ng/kg

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36452-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/kg)		Sample RPD	eQAPP RPD	Flag
	SL-573-SA6-SB-3.0-4.0	SL-973-SA6-SB-3.0-4.0			
1,2,3,6,7,8-HXCDD	0.34	0.30	13	50.00	No Qualifiers Applied
1,2,3,7,8,9-HXCDD	0.53	0.52	2	50.00	
1,2,3,7,8,9-HXCDF	0.17	0.25	38	50.00	
1,2,3,4,6,7,8-HPCDD	1.8	0.56	105	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,6,7,8-HPCDF	0.086	0.15	54	50.00	
1,2,3,6,7,8-HXCDF	0.039	5.1 U	200	50.00	
2,3,7,8-TCDF	0.051	1.0 U	200	50.00	
OCDD	16	3.9	122	50.00	

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36452-2 **Laboratory: TA DEN**

EDD Filename: Prep280-36452-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-573-SA6-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	J	4.5	5.7	MRL	ng/kg	
	1,2,3,4,7,8,9-HPCDF	Q J	0.69	5.7	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	J	4.2	5.7	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.40	5.7	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.39	5.7	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.15	5.7	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	J	1.8	5.7	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q J	0.13	5.7	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q B J	0.13	5.7	MRL	ng/kg	
	2,3,7,8-TCDD	Q J	0.24	1.1	MRL	ng/kg	
	OCDF	S B J	3.9	11	MRL	ng/kg	
SL-573-SA6-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	Q B J	1.8	5.2	MRL	ng/kg	
	1,2,3,4,6,7,8-HPCDF	Q J	0.086	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.34	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.039	5.2	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDD	Q J	0.53	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	S Q J	0.17	5.2	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.051	1.0	MRL	ng/kg	
SL-973-SA6-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	B J	0.56	5.1	MRL	ng/kg	
	1,2,3,4,6,7,8-HPCDF	Q J	0.15	5.1	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.30	5.1	MRL	ng/kg	J (all detects)
	1,2,3,7,8,9-HXCDD	J	0.52	5.1	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.25	5.1	MRL	ng/kg	
	OCDD	B J	3.9	10	MRL	ng/kg	

SAMPLE DELIVERY GROUP

280-36535-1

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
03-Dec-2012	TB-120312	280-36535-14	TB	METHOD	8015B GRO	III
03-Dec-2012	SL-571-SA6-SB-0.0-0.5	280-36535-1	N	3546	8270C SIM	III
03-Dec-2012	SL-571-SA6-SB-0.0-0.5	280-36535-1	N	3550C	8015B EFH	III
03-Dec-2012	SL-571-SA6-SB-0.0-0.5	280-36535-2	N	3050B	6010C	III
03-Dec-2012	SL-571-SA6-SB-0.0-0.5	280-36535-2	N	3050B	6020A	III
03-Dec-2012	SL-571-SA6-SB-0.0-0.5	280-36535-2	N	3546	8082A	III
03-Dec-2012	SL-571-SA6-SB-0.0-0.5	280-36535-2	N	7471B	7471B	III
03-Dec-2012	SL-571-SA6-SB-4.5	280-36535-7	N	5035	8015B GRO	III
03-Dec-2012	SL-571-SA6-SB-4.5MS	280-36535-7MS	MS	5035	8015B GRO	III
03-Dec-2012	SL-571-SA6-SB-4.5MSD	280-36535-7MSD	MSD	5035	8015B GRO	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0	280-36535-3	N	3546	8270C SIM	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0	280-36535-3	N	3550C	8015B EFH	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MS	280-36535-3MS	MS	3546	8270C SIM	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MS	280-36535-3MS	MS	3550C	8015B EFH	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MSD	280-36535-3MSD	MSD	3546	8270C SIM	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MSD	280-36535-3MSD	MSD	3550C	8015B EFH	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0	280-36535-4	N	3050B	6010C	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0	280-36535-4	N	3050B	6020A	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0	280-36535-4	N	3546	8082A	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0	280-36535-4	N	7471B	7471B	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MS	280-36535-4MS	MS	3050B	6010C	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MS	280-36535-4MS	MS	3050B	6020A	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MS	280-36535-4MS	MS	3546	8082A	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MS	280-36535-4MS	MS	7471B	7471B	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MSD	280-36535-4MSD	MSD	3050B	6010C	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MSD	280-36535-4MSD	MSD	3050B	6020A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MSD	280-36535-4MSD	MSD	3546	8082A	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MSD	280-36535-4MSD	MSD	7471B	7471B	III
03-Dec-2012	SL-971-SA6-SB-4.5	280-36535-8	FD	5035	8015B GRO	III
03-Dec-2012	SL-971-SA6-SB-4.0-5.0	280-36535-5	FD	3546	8270C SIM	III
03-Dec-2012	SL-971-SA6-SB-4.0-5.0	280-36535-5	FD	3550C	8015B EFH	III
03-Dec-2012	SL-971-SA6-SB-4.0-5.0	280-36535-6	FD	3050B	6010C	III
03-Dec-2012	SL-971-SA6-SB-4.0-5.0	280-36535-6	FD	3050B	6020A	III
03-Dec-2012	SL-971-SA6-SB-4.0-5.0	280-36535-6	FD	3546	8082A	III
03-Dec-2012	SL-971-SA6-SB-4.0-5.0	280-36535-6	FD	7471B	7471B	III
03-Dec-2012	SL-572-SA6-SB-0.0-0.5	280-36535-10	N	3050B	6010C	III
03-Dec-2012	SL-572-SA6-SB-0.0-0.5	280-36535-10	N	3050B	6020A	III
03-Dec-2012	SL-572-SA6-SB-0.0-0.5	280-36535-10	N	3546	8082A	III
03-Dec-2012	SL-572-SA6-SB-0.0-0.5	280-36535-10	N	7471B	7471B	III
03-Dec-2012	SL-572-SA6-SB-0.0-0.5	280-36535-9	N	3546	8270C SIM	III
03-Dec-2012	SL-572-SA6-SB-0.0-0.5	280-36535-9	N	3550C	8015B EFH	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-15	N	3546	8270C SIM	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-15	N	3550C	8015B EFH	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-16	N	3050B	6010C	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-16	N	3050B	6020A	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-16	N	3546	8081B	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-16	N	3546	8082A	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-16	N	7471B	7471B	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-16	N	8151A	8151A	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0MS	280-36535-16MS	MS	3546	8081B	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0MSD	280-36535-16MSD	MSD	3546	8081B	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-16RA	N	3546	8081B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2012	SL-672-SA6-SB-4.5	280-36535-17	N	5035	8015B GRO	III
03-Dec-2012	SL-572-SA6-SB-3.0	280-36535-13	N	5035	8015B GRO	III
03-Dec-2012	SL-572-SA6-SB-2.5-3.5	280-36535-11	N	3546	8270C SIM	III
03-Dec-2012	SL-572-SA6-SB-2.5-3.5	280-36535-11	N	3550C	8015B EFH	III
03-Dec-2012	SL-572-SA6-SB-2.5-3.5	280-36535-12	N	3050B	6010C	III
03-Dec-2012	SL-572-SA6-SB-2.5-3.5	280-36535-12	N	3050B	6020A	III
03-Dec-2012	SL-572-SA6-SB-2.5-3.5	280-36535-12	N	3546	8082A	III
03-Dec-2012	SL-572-SA6-SB-2.5-3.5	280-36535-12	N	7471B	7471B	III
03-Dec-2012	SL-574-SA6-SB-0.0-0.5	280-36535-26	N	3546	8270C SIM	III
03-Dec-2012	SL-574-SA6-SB-0.0-0.5	280-36535-26	N	3550C	8015B EFH	III
03-Dec-2012	SL-574-SA6-SB-0.0-0.5	280-36535-27	N	3050B	6010C	III
03-Dec-2012	SL-574-SA6-SB-0.0-0.5	280-36535-27	N	3050B	6020A	III
03-Dec-2012	SL-574-SA6-SB-0.0-0.5	280-36535-27	N	3546	8082A	III
03-Dec-2012	SL-574-SA6-SB-0.0-0.5	280-36535-27	N	7471B	7471B	III
03-Dec-2012	SL-574-SA6-SB-3.0	280-36535-30	N	5035	8015B GRO	III
03-Dec-2012	SL-574-SA6-SB-2.5-3.5	280-36535-28	N	3546	8270C SIM	III
03-Dec-2012	SL-574-SA6-SB-2.5-3.5	280-36535-28	N	3550C	8015B EFH	III
03-Dec-2012	SL-574-SA6-SB-2.5-3.5	280-36535-29	N	3050B	6010C	III
03-Dec-2012	SL-574-SA6-SB-2.5-3.5	280-36535-29	N	3050B	6020A	III
03-Dec-2012	SL-574-SA6-SB-2.5-3.5	280-36535-29	N	3546	8082A	III
03-Dec-2012	SL-574-SA6-SB-2.5-3.5	280-36535-29	N	7471B	7471B	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-18	N	3546	8270C SIM	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-18	N	3550C	8015B EFH	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-19	N	3050B	6010C	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-19	N	3050B	6020A	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-19	N	3546	8081B	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-19	N	3546	8082A	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-19	N	7471B	7471B	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-19	N	8151A	8151A	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-19RA	N	3546	8081B	III
03-Dec-2012	SL-674-SA6-SB-3.0	280-36535-20	N	5035	8015B GRO	III
03-Dec-2012	SL-559-SA6-SB-0.0-0.5	280-36535-21	N	3546	8270C SIM	III
03-Dec-2012	SL-559-SA6-SB-0.0-0.5	280-36535-21	N	3550C	8015B EFH	III
03-Dec-2012	SL-559-SA6-SB-0.0-0.5	280-36535-22	N	3050B	6010C	III
03-Dec-2012	SL-559-SA6-SB-0.0-0.5	280-36535-22	N	3050B	6020A	III
03-Dec-2012	SL-559-SA6-SB-0.0-0.5	280-36535-22	N	3546	8082A	III
03-Dec-2012	SL-559-SA6-SB-0.0-0.5	280-36535-22	N	7471B	7471B	III
03-Dec-2012	SL-559-SA6-SB-4.5	280-36535-25	N	5035	8015B GRO	III
03-Dec-2012	SL-559-SA6-SB-4.0-5.0	280-36535-23	N	3546	8270C SIM	III
03-Dec-2012	SL-559-SA6-SB-4.0-5.0	280-36535-23	N	3550C	8015B EFH	III
03-Dec-2012	SL-559-SA6-SB-4.0-5.0	280-36535-24	N	3050B	6010C	III
03-Dec-2012	SL-559-SA6-SB-4.0-5.0	280-36535-24	N	3050B	6020A	III
03-Dec-2012	SL-559-SA6-SB-4.0-5.0	280-36535-24	N	3546	8082A	III
03-Dec-2012	SL-559-SA6-SB-4.0-5.0	280-36535-24	N	7471B	7471B	III
03-Dec-2012	SL-664-SA6-SB-2.0-3.0	280-36535-31	N	3546	8270C SIM	III
03-Dec-2012	SL-664-SA6-SB-2.0-3.0	280-36535-31	N	3550C	8015B EFH	III
03-Dec-2012	SL-664-SA6-SB-2.0-3.0	280-36535-32	N	3050B	6010C	III
03-Dec-2012	SL-664-SA6-SB-2.0-3.0	280-36535-32	N	3050B	6020A	III
03-Dec-2012	SL-664-SA6-SB-2.0-3.0	280-36535-32	N	3546	8082A	III
03-Dec-2012	SL-664-SA6-SB-2.0-3.0	280-36535-32	N	7471B	7471B	III
03-Dec-2012	SL-664-SA6-SB-2.5	280-36535-33	N	5035	8015B GRO	III

III = EPA Level 3 Data Review *N = 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: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-559-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 2:20:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.7	J	0.37	MDL	9.1	MRL	mg/Kg	J	Z

Sample ID: **SL-559-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 2:20:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	9900	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
BORON	2.4	J	1.0	MDL	10	MRL	mg/Kg	U	F
LITHIUM	20	J	0.32	MDL	39	MRL	mg/Kg	J	Z
MANGANESE	260	J	0.11	MDL	520	MRL	mg/Kg	J	Z
POTASSIUM	2800	J	43	MDL	6700	MRL	mg/Kg	J	Z
SODIUM	120	J	62	MDL	530	MRL	mg/Kg	J	Z
TIN	2.0	J B	0.96	MDL	11	MRL	mg/Kg	U	B

Sample ID: **SL-559-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 2:30:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.5	J	0.35	MDL	8.4	MRL	mg/Kg	J	Z

Sample ID: **SL-559-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 2:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	16000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
BORON	2.2	J	0.96	MDL	9.5	MRL	mg/Kg	U	F, F
LITHIUM	23	J	0.29	MDL	36	MRL	mg/Kg	J	Z
MANGANESE	350	J	0.098	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	3500	J	40	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	94	J	58	MDL	490	MRL	mg/Kg	U	F
TIN	1.1	J B	0.89	MDL	11	MRL	mg/Kg	U	B

Sample ID: **SL-571-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 9:05:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.7	J	0.33	MDL	8.0	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-571-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 9:05:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.4	MDL	19000	MRL	mg/Kg	J	Z
BORON	1.8	J	0.92	MDL	9.1	MRL	mg/Kg	U	F
LITHIUM	25	J	0.28	MDL	35	MRL	mg/Kg	J	Z
MANGANESE	300	J	0.093	MDL	460	MRL	mg/Kg	J	Z
POTASSIUM	4000	J	38	MDL	6000	MRL	mg/Kg	J	Z
SODIUM	87	J	55	MDL	470	MRL	mg/Kg	J	Z
TIN	1.2	J B	0.85	MDL	10	MRL	mg/Kg	U	B

Sample ID: **SL-571-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 9:10:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.4	J	0.31	MDL	7.6	MRL	mg/Kg	J	Z

Sample ID: **SL-571-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 9:10:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	0.88	J	0.86	MDL	8.5	MRL	mg/Kg	U	F, F
LITHIUM	25	J	0.26	MDL	33	MRL	mg/Kg	J	Z
MANGANESE	270	J	0.088	MDL	440	MRL	mg/Kg	J	Z
POTASSIUM	2600	J	36	MDL	5600	MRL	mg/Kg	J	Z
SODIUM	140	J	52	MDL	440	MRL	mg/Kg	J	Z
TIN	1.3	J B	0.80	MDL	9.6	MRL	mg/Kg	U	B

Sample ID: **SL-572-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 10:40:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.1	J	0.35	MDL	8.6	MRL	mg/Kg	J	Z

Sample ID: **SL-572-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 10:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-572-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 10:40:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.5	J	0.98	MDL	9.7	MRL	mg/Kg	U	F
LITHIUM	26	J	0.30	MDL	37	MRL	mg/Kg	J	Z
MANGANESE	290	J	0.10	MDL	490	MRL	mg/Kg	J	Z
POTASSIUM	3100	J	41	MDL	6400	MRL	mg/Kg	J	Z
SODIUM	83	J	59	MDL	500	MRL	mg/Kg	U	F
TIN	1.0	J B	0.91	MDL	11	MRL	mg/Kg	U	B

Sample ID: SL-572-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 10:55:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	0.91	J	0.33	MDL	8.1	MRL	mg/Kg	J	Z

Sample ID: SL-572-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 10:55:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
LITHIUM	18	J	0.28	MDL	35	MRL	mg/Kg	J	Z
MANGANESE	270	J	0.095	MDL	470	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	39	MDL	6100	MRL	mg/Kg	J	Z
SODIUM	200	J	56	MDL	470	MRL	mg/Kg	J	Z
TIN	1.3	J B	0.86	MDL	10	MRL	mg/Kg	U	B

Sample ID: SL-574-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 1:00:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.1	J	0.37	MDL	9.0	MRL	mg/Kg	J	Z

Sample ID: SL-574-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 1:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	9700	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
BORON	1.1	J	1.0	MDL	10	MRL	mg/Kg	U	F
LITHIUM	21	J	0.31	MDL	39	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-574-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 1:00:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	250	J	0.10	MDL	520	MRL	mg/Kg	J	Z
POTASSIUM	3100	J	43	MDL	6700	MRL	mg/Kg	J	Z
SODIUM	130	J	62	MDL	520	MRL	mg/Kg	J	Z
TIN	1.4	J B	0.96	MDL	11	MRL	mg/Kg	U	B

Sample ID: **SL-574-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 1:15:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.0	J	0.35	MDL	8.6	MRL	mg/Kg	J	Z

Sample ID: **SL-574-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 1:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
BORON	0.98	U	0.98	MDL	9.7	MRL	mg/Kg	U	F
LITHIUM	24	J	0.30	MDL	37	MRL	mg/Kg	J	Z
MANGANESE	170	J	0.10	MDL	500	MRL	mg/Kg	J	Z
POTASSIUM	2100	J	41	MDL	6400	MRL	mg/Kg	J	Z
SODIUM	96	J	59	MDL	500	MRL	mg/Kg	J	Z
TIN	1.6	J B	0.91	MDL	11	MRL	mg/Kg	U	B

Sample ID: **SL-664-SA6-SB-2.0-3.0** ***Collected:*** **12/3/2012 3:00:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.8	J	0.35	MDL	8.5	MRL	mg/Kg	J	Z

Sample ID: **SL-664-SA6-SB-2.0-3.0** ***Collected:*** **12/3/2012 3:00:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
BORON	2.4	J	0.97	MDL	9.6	MRL	mg/Kg	U	F, F
LITHIUM	20	J	0.30	MDL	37	MRL	mg/Kg	J	Z
MANGANESE	270	J	0.099	MDL	490	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-664-SA6-SB-2.0-3.0** ***Collected:*** **12/3/2012 3:00:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3400	J	41	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	68	J	58	MDL	500	MRL	mg/Kg	U	F, F
TIN	1.1	J B	0.90	MDL	11	MRL	mg/Kg	U	B

Sample ID: **SL-672-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 10:45:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.7	J	0.37	MDL	8.9	MRL	mg/Kg	J	Z

Sample ID: **SL-672-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 10:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
BORON	1.8	J	1.0	MDL	10	MRL	mg/Kg	U	F, F
LITHIUM	30	J	0.31	MDL	38	MRL	mg/Kg	J	Z
MANGANESE	240	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	1800	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	240	J	61	MDL	520	MRL	mg/Kg	J	Z
TIN	1.3	J B	0.94	MDL	11	MRL	mg/Kg	U	B

Sample ID: **SL-674-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 1:45:00** ***Analysis Type:*** **RE2/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.7	J	0.38	MDL	9.3	MRL	mg/Kg	J	Z

Sample ID: **SL-674-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 1:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18000	J	1.7	MDL	22000	MRL	mg/Kg	J	Z
BORON	3.8	J	1.1	MDL	10	MRL	mg/Kg	U	F
LITHIUM	24	J	0.32	MDL	40	MRL	mg/Kg	J	Z
MANGANESE	380	J	0.11	MDL	530	MRL	mg/Kg	J	Z
POTASSIUM	3600	J	44	MDL	6900	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-674-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 1:45:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	140	J	64	MDL	540	MRL	mg/Kg	J	Z
TIN	1.5	J B	0.98	MDL	12	MRL	mg/Kg	U	B

Sample ID: SL-971-SA6-SB-4.0-5.0 **Collected:** 12/3/2012 9:20:00 **Analysis Type:** RE2/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.5	J	0.32	MDL	7.8	MRL	mg/Kg	J	Z

Sample ID: SL-971-SA6-SB-4.0-5.0 **Collected:** 12/3/2012 9:20:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15000	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
BORON	1.2	J	0.89	MDL	8.8	MRL	mg/Kg	U	F, F
LITHIUM	25	J	0.27	MDL	34	MRL	mg/Kg	J	Z
MANGANESE	270	J	0.091	MDL	450	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	37	MDL	5800	MRL	mg/Kg	J	Z
SODIUM	150	J	54	MDL	450	MRL	mg/Kg	J	Z
TIN	1.4	J B	0.83	MDL	9.9	MRL	mg/Kg	U	B

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-559-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 2:20:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.061	J	0.014	MDL	8.6	MRL	mg/Kg	J	Z, Q
ARSENIC	3.9	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	77	J	0.070	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.36	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.42	J	0.0093	MDL	0.99	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.075	MDL	36	MRL	mg/Kg	J	Z
COBALT	5.6	J	0.0065	MDL	21	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-559-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 2:20:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	15	J	0.070	MDL	29	MRL	mg/Kg	J	Z
MOLYBDENUM	0.56	J	0.017	MDL	5.2	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.025	MDL	29	MRL	mg/Kg	J	Z
SELENIUM	0.58	J	0.13	MDL	0.65	MRL	mg/Kg	J	Z
SILVER	0.14	J	0.020	MDL	0.78	MRL	mg/Kg	U	F
THALLIUM	0.21	J	0.0035	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	28	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	78	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: **SL-559-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 2:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.015	J	0.013	MDL	8.3	MRL	mg/Kg	J	Z, Q
ARSENIC	3.2	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	110	J	0.067	MDL	130	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.63	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.23	J	0.0089	MDL	0.95	MRL	mg/Kg	J	Z
CHROMIUM	19	J	0.072	MDL	35	MRL	mg/Kg	J	Z
COBALT	6.2	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	9.8	J	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	5.1	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.41	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	13	J B	0.024	MDL	28	MRL	mg/Kg	J	Z
SELENIUM	0.57	J	0.13	MDL	0.62	MRL	mg/Kg	J	Z
SILVER	0.043	J	0.019	MDL	0.75	MRL	mg/Kg	U	F
THALLIUM	0.29	J	0.0033	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	34	J	0.037	MDL	59	MRL	mg/Kg	J	Z
ZINC	55	J	0.30	MDL	100	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-571-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 9:05:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.027	J	0.014	MDL	8.4	MRL	mg/Kg	J	Z, Q
ARSENIC	3.4	J	0.049	MDL	14	MRL	mg/Kg	J	Z
BARIUM	99	J	0.068	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.50	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.23	J	0.0091	MDL	0.97	MRL	mg/Kg	J	Z
CHROMIUM	17	J	0.073	MDL	36	MRL	mg/Kg	J	Z
COBALT	5.8	J	0.0064	MDL	20	MRL	mg/Kg	J	Z
COPPER	10	J	0.069	MDL	28	MRL	mg/Kg	J	Z
LEAD	5.1	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.36	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	12	J B	0.024	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.035	J	0.020	MDL	0.76	MRL	mg/Kg	U	F
THALLIUM	0.26	J	0.0034	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	31	J	0.037	MDL	60	MRL	mg/Kg	J	Z
ZINC	63	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-571-SA6-SB-4.0-5.0 **Collected:** 12/3/2012 9:10:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.019	J	0.013	MDL	8.4	MRL	mg/Kg	J	Z, Q
ARSENIC	4.4	J	0.049	MDL	14	MRL	mg/Kg	J	Z
BARIUM	76	J	0.068	MDL	130	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.61	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0090	MDL	0.96	MRL	mg/Kg	J	Z
CHROMIUM	19	J	0.073	MDL	35	MRL	mg/Kg	J	Z
COBALT	5.6	J	0.0064	MDL	20	MRL	mg/Kg	J	Z
COPPER	6.7	J	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	4.7	J	0.017	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.69	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	12	J B	0.024	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.029	J	0.020	MDL	0.76	MRL	mg/Kg	U	F
THALLIUM	0.27	J	0.0034	MDL	0.44	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-571-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 9:10:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	35	J	0.037	MDL	60	MRL	mg/Kg	J	Z
ZINC	47	J	0.30	MDL	110	MRL	mg/Kg	J	Z

Sample ID: **SL-572-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 10:40:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.038	J	0.015	MDL	9.5	MRL	mg/Kg	J	Z, Q
ARSENIC	3.5	J	0.055	MDL	16	MRL	mg/Kg	J	Z
BARIUM	86	J	0.077	MDL	150	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.60	J	0.025	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.45	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	18	J	0.083	MDL	40	MRL	mg/Kg	J	Z
COBALT	5.7	J	0.0072	MDL	23	MRL	mg/Kg	J	Z
COPPER	10	J	0.078	MDL	32	MRL	mg/Kg	J	Z
LEAD	11	J	0.020	MDL	37	MRL	mg/Kg	J	Z
MOLYBDENUM	0.49	J	0.019	MDL	5.8	MRL	mg/Kg	J	Z
NICKEL	12	J B	0.028	MDL	32	MRL	mg/Kg	J	Z
SELENIUM	0.69	J	0.15	MDL	0.72	MRL	mg/Kg	J	Z
SILVER	0.049	J	0.022	MDL	0.86	MRL	mg/Kg	U	F
THALLIUM	0.27	J	0.0038	MDL	0.50	MRL	mg/Kg	J	Z
VANADIUM	33	J	0.042	MDL	68	MRL	mg/Kg	J	Z
ZINC	89	J	0.35	MDL	120	MRL	mg/Kg	J	Z

Sample ID: **SL-572-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 10:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.021	J	0.014	MDL	8.8	MRL	mg/Kg	J	Z, Q
ARSENIC	3.8	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	72	J	0.071	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.48	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.10	J	0.0095	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	20	J	0.077	MDL	37	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

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

Sample ID: SL-572-SA6-SB-2.5-3.5 ***Collected:*** 12/3/2012 10:55:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.2	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	8.3	J	0.072	MDL	29	MRL	mg/Kg	J	Z
LEAD	4.2	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.23	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	9.9	J B	0.026	MDL	29	MRL	mg/Kg	J	Z
THALLIUM	0.30	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	36	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	58	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-574-SA6-SB-0.0-0.5 ***Collected:*** 12/3/2012 1:00:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.069	J	0.014	MDL	8.8	MRL	mg/Kg	J	Z, Q
ARSENIC	2.6	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	93	J	0.071	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.37	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.87	J	0.0095	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	14	J	0.077	MDL	37	MRL	mg/Kg	J	Z
COBALT	4.9	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	12	J	0.072	MDL	29	MRL	mg/Kg	J	Z
MOLYBDENUM	0.43	J	0.018	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	9.7	J B	0.026	MDL	29	MRL	mg/Kg	J	Z
SELENIUM	0.52	J	0.13	MDL	0.66	MRL	mg/Kg	J	Z
SILVER	0.099	J	0.020	MDL	0.80	MRL	mg/Kg	U	F
THALLIUM	0.21	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	27	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	100	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-574-SA6-SB-2.5-3.5 ***Collected:*** 12/3/2012 1:15:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.6	MRL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-574-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 1:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.6	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	75	J	0.070	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.72	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.11	J	0.0093	MDL	0.99	MRL	mg/Kg	J	Z
CHROMIUM	21	J	0.075	MDL	36	MRL	mg/Kg	J	Z
COBALT	4.3	J	0.0066	MDL	21	MRL	mg/Kg	J	Z
COPPER	9.1	J	0.070	MDL	29	MRL	mg/Kg	J	Z
LEAD	5.4	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.35	J	0.017	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.025	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.025	J	0.020	MDL	0.78	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	39	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	56	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: **SL-664-SA6-SB-2.0-3.0** ***Collected:*** **12/3/2012 3:00:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.024	J	0.014	MDL	8.9	MRL	mg/Kg	J	Z, Q
ARSENIC	2.9	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	92	J	0.072	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.51	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.49	J	0.0096	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	17	J	0.077	MDL	38	MRL	mg/Kg	J	Z
COBALT	5.4	J	0.0068	MDL	21	MRL	mg/Kg	J	Z
COPPER	9.4	J	0.072	MDL	30	MRL	mg/Kg	J	Z
LEAD	6.1	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.47	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	11	J B	0.026	MDL	30	MRL	mg/Kg	J	Z
SELENIUM	0.64	J	0.14	MDL	0.67	MRL	mg/Kg	J	Z
SILVER	0.28	J	0.021	MDL	0.81	MRL	mg/Kg	U	F
THALLIUM	0.24	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

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

Sample ID: SL-664-SA6-SB-2.0-3.0 ***Collected:*** 12/3/2012 3:00:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	29	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	57	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-672-SA6-SB-4.0-5.0 ***Collected:*** 12/3/2012 10:45:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	J	0.014	MDL	8.6	MRL	mg/Kg	J	Z, Q
ARSENIC	3.9	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	94	J	0.070	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.71	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0093	MDL	0.99	MRL	mg/Kg	J	Z
CHROMIUM	23	J	0.075	MDL	36	MRL	mg/Kg	J	Z
COBALT	5.2	J	0.0066	MDL	21	MRL	mg/Kg	J	Z
COPPER	7.7	J	0.070	MDL	29	MRL	mg/Kg	J	Z
LEAD	5.5	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.32	J	0.017	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	12	J B	0.025	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.073	J	0.020	MDL	0.78	MRL	mg/Kg	U	F
THALLIUM	0.26	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	42	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	52	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-674-SA6-SB-2.5-3.5 ***Collected:*** 12/3/2012 1:45:00 ***Analysis Type:*** RES/TOT ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.018	J	0.014	MDL	8.5	MRL	mg/Kg	J	Z, Q
ARSENIC	3.7	J	0.049	MDL	15	MRL	mg/Kg	J	Z
BARIUM	130	J	0.069	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.67	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.48	J	0.0092	MDL	0.98	MRL	mg/Kg	J	Z
CHROMIUM	23	J	0.074	MDL	36	MRL	mg/Kg	J	Z
COBALT	7.1	J	0.0065	MDL	21	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-674-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 1:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	14	J	0.069	MDL	28	MRL	mg/Kg	J	Z
LEAD	7.5	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.32	J	0.017	MDL	5.2	MRL	mg/Kg	J	Z
NICKEL	17	J B	0.025	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.25	J	0.020	MDL	0.77	MRL	mg/Kg	U	F
THALLIUM	0.30	J	0.0034	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	41	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	71	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: **SL-971-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 9:20:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.017	J	0.014	MDL	8.7	MRL	mg/Kg	J	Z, Q
ARSENIC	4.4	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	76	J	0.071	MDL	140	MRL	mg/Kg	J	Z, Q
BERYLLIUM	0.62	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0094	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	20	J	0.076	MDL	37	MRL	mg/Kg	J	Z
COBALT	5.7	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	6.7	J	0.071	MDL	29	MRL	mg/Kg	J	Z
LEAD	4.9	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.89	J	0.018	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	13	J B	0.025	MDL	29	MRL	mg/Kg	J	Z
SELENIUM	0.59	J	0.13	MDL	0.66	MRL	mg/Kg	J	Z
SILVER	0.038	J	0.020	MDL	0.79	MRL	mg/Kg	U	F
THALLIUM	0.27	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	36	J	0.039	MDL	62	MRL	mg/Kg	J	Z
ZINC	46	J	0.32	MDL	110	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 7471B **Matrix:** SO

Sample ID: SL-571-SA6-SB-4.0-5.0 **Collected:** 12/3/2012 9:10:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0084	J	0.0060	MDL	0.022	MRL	mg/Kg	J	Z

Sample ID: SL-572-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 10:40:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0092	J	0.0064	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-574-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 1:15:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0081	J	0.0067	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: SL-664-SA6-SB-2.0-3.0 **Collected:** 12/3/2012 3:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.010	J	0.0069	MDL	0.025	MRL	mg/Kg	J	Z

Sample ID: SL-672-SA6-SB-4.0-5.0 **Collected:** 12/3/2012 10:45:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0073	J	0.0067	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: SL-674-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 1:45:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.010	J	0.0067	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: SL-971-SA6-SB-4.0-5.0 **Collected:** 12/3/2012 9:20:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0095	J	0.0066	MDL	0.024	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

Method: **8015B EFH** ***Matrix:*** **SO**

Sample ID: **SL-559-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 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
EFH(C21-C30)	1.1	J	1.0	MDL	5.0	MRL	mg/Kg	J	Z
EFH(C30-C40)	5.8	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: **SL-571-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL EFH(C8-C40)	1.4	J B	0.74	MDL	4.4	MRL	mg/Kg	U	B

Sample ID: **SL-571-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 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
TOTAL EFH(C8-C40)	1.0	J B	0.70	MDL	4.1	MRL	mg/Kg	UJ	B, FD

Sample ID: **SL-572-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 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
TOTAL EFH(C8-C40)	1.7	J B	0.75	MDL	4.4	MRL	mg/Kg	U	B

Sample ID: **SL-572-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 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
TOTAL EFH(C8-C40)	0.84	J B	0.70	MDL	4.1	MRL	mg/Kg	U	B

Sample ID: **SL-574-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 1:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	5.2	J	5.2	MDL	26	MRL	mg/Kg	J	Z

Sample ID: **SL-574-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	3.4	J	1.0	MDL	5.1	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix: SO**

Sample ID: SL-664-SA6-SB-2.0-3.0 *Collected:* 12/3/2012 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	2.2	J	1.0	MDL	5.1	MRL	mg/Kg	J	Z
EFH(C30-C40)	7.8	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-672-SA6-SB-4.0-5.0 *Collected:* 12/3/2012 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
EFH(C30-C40)	2.0	J	1.1	MDL	11	MRL	mg/Kg	J	Z
TOTAL EFH(C8-C40)	3.4	J B	0.77	MDL	4.5	MRL	mg/Kg	U	B

Sample ID: SL-674-SA6-SB-2.5-3.5 *Collected:* 12/3/2012 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
EFH(C21-C30)	3.3	J	1.1	MDL	5.6	MRL	mg/Kg	J	Z
EFH(C30-C40)	5.8	J	1.1	MDL	11	MRL	mg/Kg	J	Z

Sample ID: SL-971-SA6-SB-4.0-5.0 *Collected:* 12/3/2012 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
TOTAL EFH(C8-C40)	0.69	U	0.69	MDL	4.0	MRL	mg/Kg	UJ	FD

Method Category: SVOA

Method: 8082A **Matrix: SO**

Sample ID: SL-559-SA6-SB-0.0-0.5 *Collected:* 12/3/2012 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	5.4	U	5.4	MDL	18	MRL	ug/Kg	UJ	S
AROCLOR 1221	16	U	16	MDL	35	MRL	ug/Kg	UJ	S
AROCLOR 1232	5.4	U	5.4	MDL	18	MRL	ug/Kg	UJ	S
AROCLOR 1242	9.6	U	9.6	MDL	18	MRL	ug/Kg	UJ	S
AROCLOR 1248	5.9	U	5.9	MDL	18	MRL	ug/Kg	UJ	S
AROCLOR 1254	5.8	U	5.8	MDL	18	MRL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8082A **Matrix: SO**

Sample ID: SL-559-SA6-SB-0.0-0.5 *Collected:* 12/3/2012 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	52		2.8	MDL	18	MRL	ug/Kg	J	S
Aroclor 1262	12	U	12	MDL	35	MRL	ug/Kg	UJ	S
Aroclor 1268	4.2	U	4.2	MDL	35	MRL	ug/Kg	UJ	S
Aroclor 5432	17	U	17	MDL	53	MRL	ug/Kg	UJ	S
Aroclor 5442	34	U	34	MDL	53	MRL	ug/Kg	UJ	S
Aroclor 5460	130		17	MDL	53	MRL	ug/Kg	J	S

Sample ID: SL-571-SA6-SB-4.0-5.0 *Collected:* 12/3/2012 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
Aroclor 5432	16	U	16	MDL	51	MRL	ug/Kg	UJ	Q
Aroclor 5442	33	U	33	MDL	51	MRL	ug/Kg	UJ	Q
Aroclor 5460	17	U	17	MDL	51	MRL	ug/Kg	UJ	Q

Sample ID: SL-674-SA6-SB-2.5-3.5 *Collected:* 12/3/2012 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	180		6.3	MDL	19	MRL	ug/Kg	J	S

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-672-SA6-SB-4.0-5.0 *Collected:* 12/3/2012 10:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	13	J p	8.4	MDL	90	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-559-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 2:20:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	12	J	12	MDL	110	MRL	ug/Kg	J	Z

Sample ID: SL-571-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 9:05:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.3	J	0.80	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	1.3	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	1.2	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	1.3	J	1.1	MDL	11	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	1.2	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-574-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 1:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	5.0	J	3.2	MDL	100	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	6.0	J	1.8	MDL	100	MRL	ug/Kg	J	Z
ANTHRACENE	22	J	7.5	MDL	100	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	73	J	11	MDL	100	MRL	ug/Kg	J	Z
FLUORANTHENE	17	J	10	MDL	100	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	14	J	11	MDL	100	MRL	ug/Kg	J	Z
PHENANTHRENE	12	J	11	MDL	100	MRL	ug/Kg	J	Z
PYRENE	15	J	11	MDL	100	MRL	ug/Kg	J	Z

Sample ID: SL-664-SA6-SB-2.0-3.0 **Collected:** 12/3/2012 3:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.38	J	0.27	MDL	10	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.35	J	0.32	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHENE	0.17	J	0.16	MDL	10	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.19	J	0.17	MDL	10	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.3	J	1.2	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	2.7	J	1.0	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-664-SA6-SB-2.0-3.0 *Collected:* 12/3/2012 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	2.4	J	1.0	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	0.75	J	0.33	MDL	10	MRL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	1.1	MDL	10	MRL	ug/Kg	J	Z
PYRENE	1.8	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: SL-672-SA6-SB-4.0-5.0 *Collected:* 12/3/2012 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
2-METHYLNAPHTHALENE	0.45	J	0.34	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.36	MDL	11	MRL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	1.2	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-674-SA6-SB-2.5-3.5 *Collected:* 12/3/2012 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.2	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	1.1	MDL	11	MRL	ug/Kg	J	Z

Method Category: SVOA

Method: BaP EQUIVALENCE **Matrix: SO**

Sample ID: SL-674-SA6-SB-2.5-3.5 *Collected:* 12/3/2012 1:45:00 *Analysis Type:* RES/WET *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BAP EQUIVALENCE	0.0012	J	0.00074	MDL	0.0050	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
B	Method Blank Contamination
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36535-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150486/1-A	12/6/2012 11:01:00 AM	IRON TIN	8.41 mg/Kg 0.943 mg/Kg	SL-559-SA6-SB-0.0-0.5 SL-559-SA6-SB-4.0-5.0 SL-571-SA6-SB-0.0-0.5 SL-571-SA6-SB-4.0-5.0 SL-572-SA6-SB-0.0-0.5 SL-572-SA6-SB-2.5-3.5 SL-574-SA6-SB-0.0-0.5 SL-574-SA6-SB-2.5-3.5 SL-664-SA6-SB-2.0-3.0 SL-672-SA6-SB-4.0-5.0 SL-674-SA6-SB-2.5-3.5 SL-971-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-559-SA6-SB-0.0-0.5(RES/TOT)	TIN	2.0 mg/Kg	2.0U mg/Kg
SL-559-SA6-SB-4.0-5.0(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg
SL-571-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.2 mg/Kg	1.2U mg/Kg
SL-571-SA6-SB-4.0-5.0(RES/TOT)	TIN	1.3 mg/Kg	1.3U mg/Kg
SL-572-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.0 mg/Kg	1.0U mg/Kg
SL-572-SA6-SB-2.5-3.5(RES/TOT)	TIN	1.3 mg/Kg	1.3U mg/Kg
SL-574-SA6-SB-0.0-0.5(RES/TOT)	TIN	1.4 mg/Kg	1.4U mg/Kg
SL-574-SA6-SB-2.5-3.5(RES/TOT)	TIN	1.6 mg/Kg	1.6U mg/Kg
SL-664-SA6-SB-2.0-3.0(RES/TOT)	TIN	1.1 mg/Kg	1.1U mg/Kg
SL-672-SA6-SB-4.0-5.0(RES/TOT)	TIN	1.3 mg/Kg	1.3U mg/Kg
SL-674-SA6-SB-2.5-3.5(RES/TOT)	TIN	1.5 mg/Kg	1.5U mg/Kg
SL-971-SA6-SB-4.0-5.0(RES/TOT)	TIN	1.4 mg/Kg	1.4U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150488/1-A	12/5/2012 9:55:00 PM	NICKEL	0.0701 mg/Kg	SL-559-SA6-SB-0.0-0.5 SL-559-SA6-SB-4.0-5.0 SL-571-SA6-SB-0.0-0.5 SL-571-SA6-SB-4.0-5.0 SL-572-SA6-SB-0.0-0.5 SL-572-SA6-SB-2.5-3.5 SL-574-SA6-SB-0.0-0.5 SL-574-SA6-SB-2.5-3.5 SL-664-SA6-SB-2.0-3.0 SL-672-SA6-SB-4.0-5.0 SL-674-SA6-SB-2.5-3.5 SL-971-SA6-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **8015B EFH**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-150419/1-A	12/7/2012 6:55:00 PM	TOTAL EFH(C8-C40)	1.28 mg/Kg	SL-559-SA6-SB-0.0-0.5 SL-559-SA6-SB-4.0-5.0 SL-571-SA6-SB-0.0-0.5 SL-571-SA6-SB-4.0-5.0 SL-572-SA6-SB-0.0-0.5 SL-572-SA6-SB-2.5-3.5 SL-574-SA6-SB-0.0-0.5 SL-574-SA6-SB-2.5-3.5 SL-664-SA6-SB-2.0-3.0 SL-672-SA6-SB-4.0-5.0 SL-674-SA6-SB-2.5-3.5 SL-971-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-571-SA6-SB-0.0-0.5(RES)	TOTAL EFH(C8-C40)	1.4 mg/Kg	4.4U mg/Kg
SL-571-SA6-SB-4.0-5.0(RES)	TOTAL EFH(C8-C40)	1.0 mg/Kg	4.1U mg/Kg
SL-572-SA6-SB-0.0-0.5(RES)	TOTAL EFH(C8-C40)	1.7 mg/Kg	4.4U mg/Kg
SL-572-SA6-SB-2.5-3.5(RES)	TOTAL EFH(C8-C40)	0.84 mg/Kg	4.1U mg/Kg
SL-672-SA6-SB-4.0-5.0(RES)	TOTAL EFH(C8-C40)	3.4 mg/Kg	4.5U mg/Kg

Surrogate Outlier Report

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **8082A**
Matrix: **SO**

Sample ID (Analysis Type)	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-559-SA6-SB-0.0 -0.5	DECACHLOROBIPHENYL	44	45.00-120.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-674-SA6-SB-2.5 -3.5	TETRACHLORO-M-XYLENE	122	45.00-120.00	All Target Analytes	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-571-SA6-SB-4.0-5.0MS (TOT) **SL-571-SA6-SB-4.0-5.0MSD (TOT)** (SL-559-SA6-SB-0.0-0.5 SL -559-SA6-SB-4.0-5.0 SL -571-SA6-SB-0.0-0.5 SL -571-SA6-SB-4.0-5.0 SL -572-SA6-SB-0.0-0.5 SL -572-SA6-SB-2.5-3.5 SL -574-SA6-SB-0.0-0.5 SL -574-SA6-SB-2.5-3.5 SL -664-SA6-SB-2.0-3.0 SL -672-SA6-SB-4.0-5.0 SL -674-SA6-SB-2.5-3.5 SL -971-SA6-SB-4.0-5.0)	ALUMINUM TITANIUM	1420 183	1425 169	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	No Qual, >4x
SL-571-SA6-SB-4.0-5.0MS (TOT) **SL-571-SA6-SB-4.0-5.0MSD (TOT)** (SL-559-SA6-SB-0.0-0.5 SL -559-SA6-SB-4.0-5.0 SL -571-SA6-SB-0.0-0.5 SL -571-SA6-SB-4.0-5.0 SL -572-SA6-SB-0.0-0.5 SL -572-SA6-SB-2.5-3.5 SL -574-SA6-SB-0.0-0.5 SL -574-SA6-SB-2.5-3.5 SL -664-SA6-SB-2.0-3.0 SL -672-SA6-SB-4.0-5.0 SL -674-SA6-SB-2.5-3.5 SL -971-SA6-SB-4.0-5.0)	IRON	-517	228	75.00-125.00	-	IRON	No Qual, >4x
SL-571-SA6-SB-4.0-5.0MS (TOT) (SL-559-SA6-SB-0.0-0.5 SL -559-SA6-SB-4.0-5.0 SL -571-SA6-SB-0.0-0.5 SL -571-SA6-SB-4.0-5.0 SL -572-SA6-SB-0.0-0.5 SL -572-SA6-SB-2.5-3.5 SL -574-SA6-SB-0.0-0.5 SL -574-SA6-SB-2.5-3.5 SL -664-SA6-SB-2.0-3.0 SL -672-SA6-SB-4.0-5.0 SL -674-SA6-SB-2.5-3.5 SL -971-SA6-SB-4.0-5.0)	MANGANESE	63	-	75.00-125.00	-	MANGANESE	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-571-SA6-SB-4.0-5.0MS (TOT) (SL-559-SA6-SB-0.0-0.5 SL -559-SA6-SB-4.0-5.0 SL -571-SA6-SB-0.0-0.5 SL -571-SA6-SB-4.0-5.0 SL -572-SA6-SB-0.0-0.5 SL -572-SA6-SB-2.5-3.5 SL -574-SA6-SB-0.0-0.5 SL -574-SA6-SB-2.5-3.5 SL -664-SA6-SB-2.0-3.0 SL -672-SA6-SB-4.0-5.0 SL -674-SA6-SB-2.5-3.5 SL -971-SA6-SB-4.0-5.0)	BARIUM	127	-	75.00-125.00	-	BARIUM	J(all detects)
SL-571-SA6-SB-4.0-5.0MS (TOT) **SL-571-SA6-SB-4.0-5.0MSD (TOT)** (SL-559-SA6-SB-0.0-0.5 SL -559-SA6-SB-4.0-5.0 SL -571-SA6-SB-0.0-0.5 SL -571-SA6-SB-4.0-5.0 SL -572-SA6-SB-0.0-0.5 SL -572-SA6-SB-2.5-3.5 SL -574-SA6-SB-0.0-0.5 SL -574-SA6-SB-2.5-3.5 SL -664-SA6-SB-2.0-3.0 SL -672-SA6-SB-4.0-5.0 SL -674-SA6-SB-2.5-3.5 SL -971-SA6-SB-4.0-5.0)	ANTIMONY	10	11	75.00-125.00	-	ANTIMONY	J(all detects) UJ (all non-detects) Post Spike= 102%

Method: 8081B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-672-SA6-SB-4.0-5.0MSD (SL-672-SA6-SB-4.0-5.0)	BETA-BHC TOXAPHENE	- -	- -	67.00-115.00 19.00-174.00	27 (17.00) 64 (23.00)	BETA-BHC TOXAPHENE	J(all detects)

Method: 8082A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-571-SA6-SB-4.0-5.0MS (SL-571-SA6-SB-4.0-5.0)	Aroclor 5460	61	-	62.00-129.00	-	Aroclor 5460 Aroclor 5432 Aroclor 5442	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

Analyte	Concentration (mg/Kg) SL-571-SA6-SB-4.0-5.0 (TOT)	Concentration (mg/Kg) SL-971-SA6-SB-4.0-5.0 (TOT)	Sample RPD	eQAPP RPD	Flag
ALUMINUM	14000	15000	7	50.00	No Qualifiers Applied
BORON	0.88	1.2	31	50.00	
CALCIUM	1900	1800	5	50.00	
IRON	18000	18000	0	50.00	
LITHIUM	25	25	0	50.00	
MAGNESIUM	4500	4600	2	50.00	
MANGANESE	270	270	0	50.00	
PHOSPHORUS	380	350	8	50.00	
POTASSIUM	2600	2700	4	50.00	
SODIUM	140	150	7	50.00	
STRONTIUM	14	15	7	50.00	
TIN	1.3	1.4	7	50.00	
TITANIUM	990	970	2	50.00	
Zirconium	1.4	1.5	7	50.00	

Method: 6020A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-571-SA6-SB-4.0-5.0 (TOT)	Concentration (mg/Kg) SL-971-SA6-SB-4.0-5.0 (TOT)	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.019	0.017	11	50.00	No Qualifiers Applied
ARSENIC	4.4	4.4	0	50.00	
BARIUM	76	76	0	50.00	
BERYLLIUM	0.61	0.62	2	50.00	
CADMIUM	0.13	0.13	0	50.00	
CHROMIUM	19	20	5	50.00	
COBALT	5.6	5.7	2	50.00	
COPPER	6.7	6.7	0	50.00	
LEAD	4.7	4.9	4	50.00	
MOLYBDENUM	0.69	0.89	25	50.00	
NICKEL	12	13	8	50.00	
SELENIUM	0.79	0.59	29	50.00	
SILVER	0.029	0.038	27	50.00	
THALLIUM	0.27	0.27	0	50.00	
VANADIUM	35	36	3	50.00	
ZINC	47	46	2	50.00	

Method: 7471B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-571-SA6-SB-4.0-5.0 (TOT)	Concentration (mg/Kg) SL-971-SA6-SB-4.0-5.0 (TOT)	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0084	0.0095	12	50.00	No Qualifiers Applied

Method: 8015B EFH
Matrix: SO

Analyte	Concentration (mg/Kg) SL-571-SA6-SB-4.0-5.0	Concentration (mg/Kg) SL-971-SA6-SB-4.0-5.0	Sample RPD	eQAPP RPD	Flag
TOTAL EFH(C8-C40)	1.0	4.0 U	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 9045D
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-571-SA6-SB-4.0-5.0	SL-971-SA6-SB-4.0-5.0			
PH	7.20	7.29	1		No Qualifiers Applied
TEMPERATURE	20.4	20.2	1		

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-559-SA6-SB-0.0-0.5	ALUMINUM	J	9900	21000	MRL	mg/Kg	J (all detects)
	BORON	J	2.4	10	MRL	mg/Kg	
	LITHIUM	J	20	39	MRL	mg/Kg	
	MANGANESE	J	260	520	MRL	mg/Kg	
	POTASSIUM	J	2800	6700	MRL	mg/Kg	
	SODIUM	J	120	530	MRL	mg/Kg	
	TIN	J B	2.0	11	MRL	mg/Kg	
	Zirconium	J	1.7	9.1	MRL	mg/Kg	
SL-559-SA6-SB-4.0-5.0	ALUMINUM	J	16000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	2.2	9.5	MRL	mg/Kg	
	LITHIUM	J	23	36	MRL	mg/Kg	
	MANGANESE	J	350	480	MRL	mg/Kg	
	POTASSIUM	J	3500	6300	MRL	mg/Kg	
	SODIUM	J	94	490	MRL	mg/Kg	
	TIN	J B	1.1	11	MRL	mg/Kg	
	Zirconium	J	2.5	8.4	MRL	mg/Kg	
SL-571-SA6-SB-0.0-0.5	ALUMINUM	J	12000	19000	MRL	mg/Kg	J (all detects)
	BORON	J	1.8	9.1	MRL	mg/Kg	
	LITHIUM	J	25	35	MRL	mg/Kg	
	MANGANESE	J	300	460	MRL	mg/Kg	
	POTASSIUM	J	4000	6000	MRL	mg/Kg	
	SODIUM	J	87	470	MRL	mg/Kg	
	TIN	J B	1.2	10	MRL	mg/Kg	
	Zirconium	J	1.7	8.0	MRL	mg/Kg	
SL-571-SA6-SB-4.0-5.0	ALUMINUM	J	14000	18000	MRL	mg/Kg	J (all detects)
	BORON	J	0.88	8.5	MRL	mg/Kg	
	LITHIUM	J	25	33	MRL	mg/Kg	
	MANGANESE	J	270	440	MRL	mg/Kg	
	POTASSIUM	J	2600	5600	MRL	mg/Kg	
	SODIUM	J	140	440	MRL	mg/Kg	
	TIN	J B	1.3	9.6	MRL	mg/Kg	
	Zirconium	J	1.4	7.6	MRL	mg/Kg	
SL-572-SA6-SB-0.0-0.5	ALUMINUM	J	13000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	1.5	9.7	MRL	mg/Kg	
	LITHIUM	J	26	37	MRL	mg/Kg	
	MANGANESE	J	290	490	MRL	mg/Kg	
	POTASSIUM	J	3100	6400	MRL	mg/Kg	
	SODIUM	J	83	500	MRL	mg/Kg	
	TIN	J B	1.0	11	MRL	mg/Kg	
	Zirconium	J	1.1	8.6	MRL	mg/Kg	
SL-572-SA6-SB-2.5-3.5	ALUMINUM	J	12000	19000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	18	35	MRL	mg/Kg	
	MANGANESE	J	270	470	MRL	mg/Kg	
	POTASSIUM	J	2700	6100	MRL	mg/Kg	
	SODIUM	J	200	470	MRL	mg/Kg	
	TIN	J B	1.3	10	MRL	mg/Kg	
	Zirconium	J	0.91	8.1	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-574-SA6-SB-0.0-0.5	ALUMINUM	J	9700	21000	MRL	mg/Kg	J (all detects)
	BORON	J	1.1	10	MRL	mg/Kg	
	LITHIUM	J	21	39	MRL	mg/Kg	
	MANGANESE	J	250	520	MRL	mg/Kg	
	POTASSIUM	J	3100	6700	MRL	mg/Kg	
	SODIUM	J	130	520	MRL	mg/Kg	
	TIN	J B	1.4	11	MRL	mg/Kg	
	Zirconium	J	1.1	9.0	MRL	mg/Kg	
SL-574-SA6-SB-2.5-3.5	ALUMINUM	J	18000	20000	MRL	mg/Kg	J (all detects)
	LITHIUM	J	24	37	MRL	mg/Kg	
	MANGANESE	J	170	500	MRL	mg/Kg	
	POTASSIUM	J	2100	6400	MRL	mg/Kg	
	SODIUM	J	96	500	MRL	mg/Kg	
	TIN	J B	1.6	11	MRL	mg/Kg	
	Zirconium	J	1.0	8.6	MRL	mg/Kg	
SL-664-SA6-SB-2.0-3.0	ALUMINUM	J	13000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	2.4	9.6	MRL	mg/Kg	
	LITHIUM	J	20	37	MRL	mg/Kg	
	MANGANESE	J	270	490	MRL	mg/Kg	
	POTASSIUM	J	3400	6300	MRL	mg/Kg	
	SODIUM	J	68	500	MRL	mg/Kg	
	TIN	J B	1.1	11	MRL	mg/Kg	
	Zirconium	J	1.8	8.5	MRL	mg/Kg	
SL-672-SA6-SB-4.0-5.0	ALUMINUM	J	17000	21000	MRL	mg/Kg	J (all detects)
	BORON	J	1.8	10	MRL	mg/Kg	
	LITHIUM	J	30	38	MRL	mg/Kg	
	MANGANESE	J	240	510	MRL	mg/Kg	
	POTASSIUM	J	1800	6600	MRL	mg/Kg	
	SODIUM	J	240	520	MRL	mg/Kg	
	TIN	J B	1.3	11	MRL	mg/Kg	
	Zirconium	J	1.7	8.9	MRL	mg/Kg	
SL-674-SA6-SB-2.5-3.5	ALUMINUM	J	18000	22000	MRL	mg/Kg	J (all detects)
	BORON	J	3.8	10	MRL	mg/Kg	
	LITHIUM	J	24	40	MRL	mg/Kg	
	MANGANESE	J	380	530	MRL	mg/Kg	
	POTASSIUM	J	3600	6900	MRL	mg/Kg	
	SODIUM	J	140	540	MRL	mg/Kg	
	TIN	J B	1.5	12	MRL	mg/Kg	
	Zirconium	J	2.7	9.3	MRL	mg/Kg	
SL-971-SA6-SB-4.0-5.0	ALUMINUM	J	15000	18000	MRL	mg/Kg	J (all detects)
	BORON	J	1.2	8.8	MRL	mg/Kg	
	LITHIUM	J	25	34	MRL	mg/Kg	
	MANGANESE	J	270	450	MRL	mg/Kg	
	POTASSIUM	J	2700	5800	MRL	mg/Kg	
	SODIUM	J	150	450	MRL	mg/Kg	
	TIN	J B	1.4	9.9	MRL	mg/Kg	
	Zirconium	J	1.5	7.8	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-559-SA6-SB-0.0-0.5	ANTIMONY	J	0.061	8.6	MRL	mg/Kg	
	ARSENIC	J	3.9	15	MRL	mg/Kg	
	BARIUM	J	77	140	MRL	mg/Kg	
	BERYLLIUM	J	0.36	1.1	MRL	mg/Kg	
	CADMIUM	J	0.42	0.99	MRL	mg/Kg	
	CHROMIUM	J	16	36	MRL	mg/Kg	
	COBALT	J	5.6	21	MRL	mg/Kg	
	COPPER	J	15	29	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.56	5.2	MRL	mg/Kg	
	NICKEL	J B	11	29	MRL	mg/Kg	
	SELENIUM	J	0.58	0.65	MRL	mg/Kg	
	SILVER	J	0.14	0.78	MRL	mg/Kg	
	THALLIUM	J	0.21	0.45	MRL	mg/Kg	
	VANADIUM	J	28	61	MRL	mg/Kg	
	ZINC	J	78	110	MRL	mg/Kg	
SL-559-SA6-SB-4.0-5.0	ANTIMONY	J	0.015	8.3	MRL	mg/Kg	
	ARSENIC	J	3.2	14	MRL	mg/Kg	
	BARIUM	J	110	130	MRL	mg/Kg	
	BERYLLIUM	J	0.63	1.0	MRL	mg/Kg	
	CADMIUM	J	0.23	0.95	MRL	mg/Kg	
	CHROMIUM	J	19	35	MRL	mg/Kg	
	COBALT	J	6.2	20	MRL	mg/Kg	
	COPPER	J	9.8	28	MRL	mg/Kg	J (all detects)
	LEAD	J	5.1	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.41	5.0	MRL	mg/Kg	
	NICKEL	J B	13	28	MRL	mg/Kg	
	SELENIUM	J	0.57	0.62	MRL	mg/Kg	
	SILVER	J	0.043	0.75	MRL	mg/Kg	
	THALLIUM	J	0.29	0.44	MRL	mg/Kg	
	VANADIUM	J	34	59	MRL	mg/Kg	
	ZINC	J	55	100	MRL	mg/Kg	
SL-571-SA6-SB-0.0-0.5	ANTIMONY	J	0.027	8.4	MRL	mg/Kg	
	ARSENIC	J	3.4	14	MRL	mg/Kg	
	BARIUM	J	99	140	MRL	mg/Kg	
	BERYLLIUM	J	0.50	1.1	MRL	mg/Kg	
	CADMIUM	J	0.23	0.97	MRL	mg/Kg	
	CHROMIUM	J	17	36	MRL	mg/Kg	
	COBALT	J	5.8	20	MRL	mg/Kg	
	COPPER	J	10	28	MRL	mg/Kg	J (all detects)
	LEAD	J	5.1	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.36	5.1	MRL	mg/Kg	
	NICKEL	J B	12	28	MRL	mg/Kg	
	SILVER	J	0.035	0.76	MRL	mg/Kg	
	THALLIUM	J	0.26	0.44	MRL	mg/Kg	
	VANADIUM	J	31	60	MRL	mg/Kg	
	ZINC	J	63	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-571-SA6-SB-4.0-5.0	ANTIMONY	J	0.019	8.4	MRL	mg/Kg	
	ARSENIC	J	4.4	14	MRL	mg/Kg	
	BARIUM	J	76	130	MRL	mg/Kg	
	BERYLLIUM	J	0.61	1.1	MRL	mg/Kg	
	CADMIUM	J	0.13	0.96	MRL	mg/Kg	
	CHROMIUM	J	19	35	MRL	mg/Kg	
	COBALT	J	5.6	20	MRL	mg/Kg	
	COPPER	J	6.7	28	MRL	mg/Kg	J (all detects)
	LEAD	J	4.7	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.69	5.1	MRL	mg/Kg	
	NICKEL	J B	12	28	MRL	mg/Kg	
	SILVER	J	0.029	0.76	MRL	mg/Kg	
	THALLIUM	J	0.27	0.44	MRL	mg/Kg	
	VANADIUM	J	35	60	MRL	mg/Kg	
	ZINC	J	47	110	MRL	mg/Kg	
SL-572-SA6-SB-0.0-0.5	ANTIMONY	J	0.038	9.5	MRL	mg/Kg	
	ARSENIC	J	3.5	16	MRL	mg/Kg	
	BARIUM	J	86	150	MRL	mg/Kg	
	BERYLLIUM	J	0.60	1.2	MRL	mg/Kg	
	CADMIUM	J	0.45	1.1	MRL	mg/Kg	
	CHROMIUM	J	18	40	MRL	mg/Kg	
	COBALT	J	5.7	23	MRL	mg/Kg	
	COPPER	J	10	32	MRL	mg/Kg	J (all detects)
	LEAD	J	11	37	MRL	mg/Kg	
	MOLYBDENUM	J	0.49	5.8	MRL	mg/Kg	
	NICKEL	J B	12	32	MRL	mg/Kg	
	SELENIUM	J	0.69	0.72	MRL	mg/Kg	
	SILVER	J	0.049	0.86	MRL	mg/Kg	
	THALLIUM	J	0.27	0.50	MRL	mg/Kg	
	VANADIUM	J	33	68	MRL	mg/Kg	
	ZINC	J	89	120	MRL	mg/Kg	
SL-572-SA6-SB-2.5-3.5	ANTIMONY	J	0.021	8.8	MRL	mg/Kg	
	ARSENIC	J	3.8	15	MRL	mg/Kg	
	BARIUM	J	72	140	MRL	mg/Kg	
	BERYLLIUM	J	0.48	1.1	MRL	mg/Kg	
	CADMIUM	J	0.10	1.0	MRL	mg/Kg	
	CHROMIUM	J	20	37	MRL	mg/Kg	
	COBALT	J	6.2	21	MRL	mg/Kg	J (all detects)
	COPPER	J	8.3	29	MRL	mg/Kg	
	LEAD	J	4.2	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.23	5.4	MRL	mg/Kg	
	NICKEL	J B	9.9	29	MRL	mg/Kg	
	THALLIUM	J	0.30	0.46	MRL	mg/Kg	
	VANADIUM	J	36	63	MRL	mg/Kg	
	ZINC	J	58	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-574-SA6-SB-0.0-0.5	ANTIMONY	J	0.069	8.8	MRL	mg/Kg	
	ARSENIC	J	2.6	15	MRL	mg/Kg	
	BARIUM	J	93	140	MRL	mg/Kg	
	BERYLLIUM	J	0.37	1.1	MRL	mg/Kg	
	CADMIUM	J	0.87	1.0	MRL	mg/Kg	
	CHROMIUM	J	14	37	MRL	mg/Kg	
	COBALT	J	4.9	21	MRL	mg/Kg	
	COPPER	J	12	29	MRL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.43	5.3	MRL	mg/Kg	
	NICKEL	J B	9.7	29	MRL	mg/Kg	
	SELENIUM	J	0.52	0.66	MRL	mg/Kg	
	SILVER	J	0.099	0.80	MRL	mg/Kg	
	THALLIUM	J	0.21	0.46	MRL	mg/Kg	
	VANADIUM	J	27	63	MRL	mg/Kg	
	ZINC	J	100	110	MRL	mg/Kg	
SL-574-SA6-SB-2.5-3.5	ARSENIC	J	3.6	15	MRL	mg/Kg	
	BARIUM	J	75	140	MRL	mg/Kg	
	BERYLLIUM	J	0.72	1.1	MRL	mg/Kg	
	CADMIUM	J	0.11	0.99	MRL	mg/Kg	
	CHROMIUM	J	21	36	MRL	mg/Kg	
	COBALT	J	4.3	21	MRL	mg/Kg	
	COPPER	J	9.1	29	MRL	mg/Kg	J (all detects)
	LEAD	J	5.4	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.35	5.3	MRL	mg/Kg	
	NICKEL	J B	11	29	MRL	mg/Kg	
	SILVER	J	0.025	0.78	MRL	mg/Kg	
	THALLIUM	J	0.23	0.46	MRL	mg/Kg	
	VANADIUM	J	39	61	MRL	mg/Kg	
	ZINC	J	56	110	MRL	mg/Kg	
SL-664-SA6-SB-2.0-3.0	ANTIMONY	J	0.024	8.9	MRL	mg/Kg	
	ARSENIC	J	2.9	15	MRL	mg/Kg	
	BARIUM	J	92	140	MRL	mg/Kg	
	BERYLLIUM	J	0.51	1.1	MRL	mg/Kg	
	CADMIUM	J	0.49	1.0	MRL	mg/Kg	
	CHROMIUM	J	17	38	MRL	mg/Kg	
	COBALT	J	5.4	21	MRL	mg/Kg	
	COPPER	J	9.4	30	MRL	mg/Kg	J (all detects)
	LEAD	J	6.1	35	MRL	mg/Kg	
	MOLYBDENUM	J	0.47	5.4	MRL	mg/Kg	
	NICKEL	J B	11	30	MRL	mg/Kg	
	SELENIUM	J	0.64	0.67	MRL	mg/Kg	
	SILVER	J	0.28	0.81	MRL	mg/Kg	
	THALLIUM	J	0.24	0.47	MRL	mg/Kg	
	VANADIUM	J	29	63	MRL	mg/Kg	
	ZINC	J	57	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-672-SA6-SB-4.0-5.0	ANTIMONY	J	0.014	8.6	MRL	mg/Kg	
	ARSENIC	J	3.9	15	MRL	mg/Kg	
	BARIUM	J	94	140	MRL	mg/Kg	
	BERYLLIUM	J	0.71	1.1	MRL	mg/Kg	
	CADMIUM	J	0.13	0.99	MRL	mg/Kg	
	CHROMIUM	J	23	36	MRL	mg/Kg	
	COBALT	J	5.2	21	MRL	mg/Kg	
	COPPER	J	7.7	29	MRL	mg/Kg	J (all detects)
	LEAD	J	5.5	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.32	5.3	MRL	mg/Kg	
	NICKEL	J B	12	29	MRL	mg/Kg	
	SILVER	J	0.073	0.78	MRL	mg/Kg	
	THALLIUM	J	0.26	0.46	MRL	mg/Kg	
	VANADIUM	J	42	61	MRL	mg/Kg	
	ZINC	J	52	110	MRL	mg/Kg	
SL-674-SA6-SB-2.5-3.5	ANTIMONY	J	0.018	8.5	MRL	mg/Kg	
	ARSENIC	J	3.7	15	MRL	mg/Kg	
	BARIUM	J	130	140	MRL	mg/Kg	
	BERYLLIUM	J	0.67	1.1	MRL	mg/Kg	
	CADMIUM	J	0.48	0.98	MRL	mg/Kg	
	CHROMIUM	J	23	36	MRL	mg/Kg	
	COBALT	J	7.1	21	MRL	mg/Kg	
	COPPER	J	14	28	MRL	mg/Kg	J (all detects)
	LEAD	J	7.5	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.32	5.2	MRL	mg/Kg	
	NICKEL	J B	17	28	MRL	mg/Kg	
	SILVER	J	0.25	0.77	MRL	mg/Kg	
	THALLIUM	J	0.30	0.45	MRL	mg/Kg	
	VANADIUM	J	41	61	MRL	mg/Kg	
	ZINC	J	71	110	MRL	mg/Kg	
SL-971-SA6-SB-4.0-5.0	ANTIMONY	J	0.017	8.7	MRL	mg/Kg	
	ARSENIC	J	4.4	15	MRL	mg/Kg	
	BARIUM	J	76	140	MRL	mg/Kg	
	BERYLLIUM	J	0.62	1.1	MRL	mg/Kg	
	CADMIUM	J	0.13	1.0	MRL	mg/Kg	
	CHROMIUM	J	20	37	MRL	mg/Kg	
	COBALT	J	5.7	21	MRL	mg/Kg	
	COPPER	J	6.7	29	MRL	mg/Kg	J (all detects)
	LEAD	J	4.9	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.89	5.3	MRL	mg/Kg	
	NICKEL	J B	13	29	MRL	mg/Kg	
	SELENIUM	J	0.59	0.66	MRL	mg/Kg	
	SILVER	J	0.038	0.79	MRL	mg/Kg	
	THALLIUM	J	0.27	0.46	MRL	mg/Kg	
	VANADIUM	J	36	62	MRL	mg/Kg	
	ZINC	J	46	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-571-SA6-SB-4.0-5.0	MERCURY	J	0.0084	0.022	MRL	mg/Kg	J (all detects)
SL-572-SA6-SB-0.0-0.5	MERCURY	J	0.0092	0.023	MRL	mg/Kg	J (all detects)
SL-574-SA6-SB-2.5-3.5	MERCURY	J	0.0081	0.024	MRL	mg/Kg	J (all detects)
SL-664-SA6-SB-2.0-3.0	MERCURY	J	0.010	0.025	MRL	mg/Kg	J (all detects)
SL-672-SA6-SB-4.0-5.0	MERCURY	J	0.0073	0.024	MRL	mg/Kg	J (all detects)
SL-674-SA6-SB-2.5-3.5	MERCURY	J	0.010	0.024	MRL	mg/Kg	J (all detects)
SL-971-SA6-SB-4.0-5.0	MERCURY	J	0.0095	0.024	MRL	mg/Kg	J (all detects)

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-559-SA6-SB-4.0-5.0	EFH(C21-C30) EFH(C30-C40)	J J	1.1 5.8	5.0 10	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-571-SA6-SB-0.0-0.5	TOTAL EFH(C8-C40)	J B	1.4	4.4	MRL	mg/Kg	J (all detects)
SL-571-SA6-SB-4.0-5.0	TOTAL EFH(C8-C40)	J B	1.0	4.1	MRL	mg/Kg	J (all detects)
SL-572-SA6-SB-0.0-0.5	TOTAL EFH(C8-C40)	J B	1.7	4.4	MRL	mg/Kg	J (all detects)
SL-572-SA6-SB-2.5-3.5	TOTAL EFH(C8-C40)	J B	0.84	4.1	MRL	mg/Kg	J (all detects)
SL-574-SA6-SB-0.0-0.5	EFH(C15-C20)	J	5.2	26	MRL	mg/Kg	J (all detects)
SL-574-SA6-SB-2.5-3.5	EFH(C21-C30)	J	3.4	5.1	MRL	mg/Kg	J (all detects)
SL-664-SA6-SB-2.0-3.0	EFH(C21-C30) EFH(C30-C40)	J J	2.2 7.8	5.1 10	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-672-SA6-SB-4.0-5.0	EFH(C30-C40) TOTAL EFH(C8-C40)	J J B	2.0 3.4	11 4.5	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-674-SA6-SB-2.5-3.5	EFH(C21-C30) EFH(C30-C40)	J J	3.3 5.8	5.6 11	MRL MRL	mg/Kg mg/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-672-SA6-SB-4.0-5.0	2,4-DB	J p	13	90	MRL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-1 **Laboratory: TA DEN**

EDD Filename: Prep280-36535-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-559-SA6-SB-0.0-0.5	BENZO(G,H,I)PERYLENE	J	12	110	MRL	ug/Kg	J (all detects)
SL-571-SA6-SB-0.0-0.5	BENZO(A)PYRENE	J	1.3	11	MRL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.4	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	11	MRL	ug/Kg	
	CHRYSENE	J	1.3	11	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	11	MRL	ug/Kg	
SL-574-SA6-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	5.0	100	MRL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	6.0	100	MRL	ug/Kg	
	ANTHRACENE	J	22	100	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	73	100	MRL	ug/Kg	
	FLUORANTHENE	J	17	100	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	14	100	MRL	ug/Kg	
	PHENANTHRENE	J	12	100	MRL	ug/Kg	
	PYRENE	J	15	100	MRL	ug/Kg	
SL-664-SA6-SB-2.0-3.0	1-METHYLNAPHTHALENE	J	0.38	10	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.35	10	MRL	ug/Kg	
	ACENAPHTHENE	J	0.17	10	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.19	10	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	2.3	10	MRL	ug/Kg	
	CHRYSENE	J	2.7	10	MRL	ug/Kg	
	FLUORANTHENE	J	2.4	10	MRL	ug/Kg	
	NAPHTHALENE	J	0.75	10	MRL	ug/Kg	
	PHENANTHRENE	J	1.6	10	MRL	ug/Kg	
	PYRENE	J	1.8	10	MRL	ug/Kg	
SL-672-SA6-SB-4.0-5.0	2-METHYLNAPHTHALENE	J	0.45	11	MRL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.1	11	MRL	ug/Kg	
	PHENANTHRENE	J	1.5	11	MRL	ug/Kg	
SL-674-SA6-SB-2.5-3.5	CHRYSENE	J	1.2	11	MRL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.2	11	MRL	ug/Kg	

Method: BaP EQUIVALENCE

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-674-SA6-SB-2.5-3.5	BAP EQUIVALENCE	J	0.0012	0.0050	MRL	ug/Kg	J (all detects)

LDC #: 29423F4
SDG #: 280-36535-1
Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 4/3/13
Page: 1 of 1
Reviewer: AR
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010C/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	—	Sampling dates: 12/3/12
II.	ICP/MS Tune	—	
III.	Calibration	-	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	Al, Fe, Mn, Ti 74%; Sb 85 = 102% (5/W)
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	N	
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	—	2 + 3 ~~EB1-120712 (280-36788-1)~~
XV	Field Blanks	SW	[3]EB = EB-120512, EB1-120612, ~~EB2-120612~~ [5] (280-36640-1) (280-36711-1) FB = FB-111412 (280-35930-1) [2]EB: EB2-120612 (280-36711-1) ~~EB2-120712 (280-36711-1)~~

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

Validated Samples:

1	SL-571-SA6-SB-0.0-0.5 [2]	11	SL-574-SA6-SB-2.5-3.5 [1]	21		31	
2	SL-571-SA6-SB-4.0-5.0MS [1]	12	SL-664-SA6-SB-2.0-3.0 [3]	22		32	
3	SL-971-SA6-SB-4.0-5.0 [1]	13	SL-571-SA6-SB-4.0-5.0MSMS	23		33	
4	SL-572-SA6-SB-0.0-0.5 [2]	14	SL-571-SA6-SB-4.0-5.0MSMSD	24		34	
5	SL-572-SA6-SB-2.5-3.5 [1]	15		25		35	
6	SL-672-SA6-SB-4.0-5.0 [3]	16		26		36	
7	SL-674-SA6-SB-2.5-3.5 [3]	17		27		37	
8	SL-559-SA6-SB-0.0-0.5 [2]	18		28		38	
9	SL-559-SA6-SB-4.0-5.0 [1]	19		29		39	
10	SL-574-SA6-SB-0.0-0.5 [2]	20		30		40	

Notes: _____

LDC #: 29423F4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: A1
2nd Reviewer: V

METHOD: Trace Metals (EPA SW846 6010C/6020A/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 12/6/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / (Other): EB Associated Samples: 2-3, 5, 9, 11

Analyte	Blank ID	Sample Identification										
	EB1-120612	Action Limit	2	3	9							
B	0.0044	2.2	0.88	1.2	2.2							
Mn	0.00038	0.19										
Na	0.19	95			94							

Sampling date: 12/7/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / (Other) EB Associated Samples: 1, 4, 8, 10

Analyte	Blank ID	Sample Identification										
	EB2-120712	Action Limit	No Qualifiers									
Na	0.15	75										

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 #: 29423F4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer:
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010C/6020A/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 12/5/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / (Other) EB Associated Samples: 6-7, 12

Analyte	Blank ID	Sample Identification										
	EB-120512	Action Limit	6	12								
B	0.0059	2.95	1.8	2.4								
Mg	0.012	6										
Mn	0.00051	0.255										
Na	0.27	135		68								

LDC #: 29423F4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer:
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010C/6020A/7000)

Blank units: mg/L **Associated sample units:** mg/Kg
Sampling date: 11/14/12 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-111412	Action Limit	1	2	3	4	6	7	8	9	10	11
B	0.024	12	1.8	0.88	1.2	1.5	1.8	3.8	2.4	2.2	1.1	
Na	0.17	85				83						
Ag	0.00078	0.39	0.035	0.029	0.038	0.049	0.073	0.25	0.14	0.043	0.099	0.025

Sampling date: mg/L Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-111412	Action Limit	12										
B	0.024	12	2.4										
Na	0.17	85	68										
Ag	0.00078	0.39	0.28										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

280-36535-2

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
03-Dec-2012	SL-571-SA6-SB-0.0-0.5	280-36535-2	N	1613	1613B	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0	280-36535-4	N	1613	1613B	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MS	280-36535-4 MS	MS	1613	1613B	III
03-Dec-2012	SL-571-SA6-SB-4.0-5.0MSD	280-36535-4 MSD	MSD	1613	1613B	III
03-Dec-2012	SL-971-SA6-SB-4.0-5.0	280-36535-6	FD	1613	1613B	III
03-Dec-2012	SL-572-SA6-SB-0.0-0.5	280-36535-10	N	1613	1613B	III
03-Dec-2012	SL-672-SA6-SB-4.0-5.0	280-36535-16	N	1613	1613B	III
03-Dec-2012	SL-572-SA6-SB-2.5-3.5	280-36535-12	N	1613	1613B	III
03-Dec-2012	SL-574-SA6-SB-0.0-0.5	280-36535-27	N	1613	1613B	III
03-Dec-2012	SL-574-SA6-SB-2.5-3.5	280-36535-29	N	1613	1613B	III
03-Dec-2012	SL-674-SA6-SB-2.5-3.5	280-36535-19	N	1613	1613B	III
03-Dec-2012	SL-559-SA6-SB-0.0-0.5	280-36535-22	N	1613	1613B	III
03-Dec-2012	SL-559-SA6-SB-4.0-5.0	280-36535-24	N	1613	1613B	III
03-Dec-2012	SL-664-SA6-SB-2.0-3.0	280-36535-32	N	1613	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-559-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 2:20:00** ***Analysis Type:*** **DL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	13	B	0.54	MDL	11	MRL	ng/kg	J	I
1,2,3,4,7,8,9-HPCDF	2.6	B J	0.63	MDL	11	MRL	ng/kg	J	Z, I
1,2,3,4,7,8-HxCDD	2.3	Q J	0.50	MDL	11	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.1	Q J	0.33	MDL	11	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	8.3	J	0.51	MDL	11	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	1.7	J	0.35	MDL	11	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	6.8	J C	0.48	MDL	11	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	1.3	Q J	0.56	MDL	11	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.75	Q B J	0.36	MDL	11	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.65	Q J	0.39	MDL	11	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.81	Q J	0.46	MDL	2.2	MRL	ng/kg	J	Z
OCDD	2500	B	1.8	MDL	22	MRL	ng/kg	J	I
OCDF	23	B	0.87	MDL	22	MRL	ng/kg	J	I

Sample ID: **SL-559-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 2:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.38	Q J	0.12	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.18	Q B J	0.082	MDL	5.2	MRL	ng/kg	U	B
1,2,3,7,8,9-HXCDF	0.14	Q J	0.064	MDL	5.2	MRL	ng/kg	J	Z
OCDD	4.5	B J	0.20	MDL	10	MRL	ng/kg	U	B

Sample ID: **SL-571-SA6-SB-0.0-0.5** ***Collected:*** **12/3/2012 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.28	J	0.18	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	3.4	J	0.15	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.45	Q J	0.085	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.21	Q J	0.081	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	1.8	Q J	0.14	MDL	5.3	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.16	Q J	0.085	MDL	5.3	MRL	ng/kg	J	Z
OCDD	5200	B E	0.21	MDL	11	MRL	ng/kg	J	*XI

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-571-SA6-SB-4.0-5.0 **Collected:** 12/3/2012 9:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	8.4		0.062	MDL	5.2	MRL	ng/kg	J	FD
1,2,3,4,6,7,8-HPCDF	0.32	Q B J	0.040	MDL	5.2	MRL	ng/kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.11	J	0.052	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.098	J	0.023	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.32	Q J	0.060	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.048	J	0.024	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.32	J	0.052	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.050	Q J	0.033	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.062	Q J	0.070	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,7,8-PECDF	0.019	Q B J	0.048	MDL	5.2	MRL	ng/kg	UJ	B, FD
2,3,4,7,8-PECDF	0.056	Q J	0.042	MDL	5.2	MRL	ng/kg	J	Z, FD
2,3,7,8-TCDD	0.10	Q J	0.12	MDL	1.0	MRL	ng/kg	J	Z, FD
OCDD	270	B	0.19	MDL	10	MRL	ng/kg	J	Q, FD
OCDF	2.2	B J	0.057	MDL	10	MRL	ng/kg	UJ	B, FD

Sample ID: SL-572-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 10:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.6	B J	0.097	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	2.8	C J	0.049	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.64	Q J	0.048	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.15	Q J	0.052	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	3.8	J	0.16	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.50	B J	0.075	MDL	5.7	MRL	ng/kg	U	B
2,3,4,6,7,8-HXCDF	0.72	B J	0.045	MDL	5.7	MRL	ng/kg	J	Z
2,3,4,7,8-PECDF	0.49	Q J	0.075	MDL	5.7	MRL	ng/kg	J	Z
2,3,7,8-TCDD	0.36	Q J	0.19	MDL	1.1	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.40	Q J	0.10	MDL	1.1	MRL	ng/kg	J	Z
OCDD	18000	B E	0.32	MDL	11	MRL	ng/kg	J	*XI

Sample ID: SL-572-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 10:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.19	J	0.052	MDL	5.2	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.043	Q B J	0.028	MDL	5.2	MRL	ng/kg	U	B

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-572-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 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
OCDD	2.3	B J	0.056	MDL	10	MRL	ng/kg	U	B
OCDF	0.23	B J	0.057	MDL	10	MRL	ng/kg	U	B

Sample ID: SL-574-SA6-SB-0.0-0.5 **Collected:** 12/3/2012 1:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.75	J	0.13	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	4.8	Q J	0.31	MDL	5.5	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	2.3	Q B J	0.28	MDL	5.5	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	3.8	Q B J	0.11	MDL	5.5	MRL	ng/kg	J	Z
OCDD	17000	B E	0.63	MDL	11	MRL	ng/kg	J	*XI

Sample ID: SL-574-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 1:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.43	B J	0.048	MDL	5.2	MRL	ng/kg	U	B
1,2,3,4,7,8,9-HPCDF	0.14	Q B J	0.074	MDL	5.2	MRL	ng/kg	U	B
1,2,3,4,7,8-HxCDD	0.14	Q J	0.067	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.21	Q J	0.032	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	0.41	J	0.068	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.17	J	0.033	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	0.50	Q J	0.064	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.077	Q J	0.036	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.13	Q J	0.087	MDL	5.2	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.059	Q J	0.078	MDL	1.0	MRL	ng/kg	J	Z
OCDF	0.78	B J	0.077	MDL	10	MRL	ng/kg	U	B

Sample ID: SL-664-SA6-SB-2.0-3.0 **Collected:** 12/3/2012 3:00:00 **Analysis Type:** RE2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.75	J	0.071	MDL	1.1	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-664-SA6-SB-2.0-3.0** ***Collected:*** **12/3/2012 3:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.6	Q B J	0.11	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HxCDD	0.60	J	0.069	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.3	Q J	0.038	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	1.9	J	0.069	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.61	Q J	0.039	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	1.5	Q J	0.065	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDF	0.15	Q J	0.045	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.42	Q J	0.092	MDL	5.3	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.50	B J	0.090	MDL	5.3	MRL	ng/kg	U	B
2,3,4,6,7,8-HXCDF	0.44	B J	0.036	MDL	5.3	MRL	ng/kg	U	B
2,3,4,7,8-PECDF	0.60	J	0.074	MDL	5.3	MRL	ng/kg	J	Z

Sample ID: **SL-672-SA6-SB-4.0-5.0** ***Collected:*** **12/3/2012 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.2	B J	0.086	MDL	5.8	MRL	ng/kg	U	B
1,2,3,4,7,8-HxCDD	0.49	J	0.067	MDL	5.8	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	0.47	Q J	0.042	MDL	5.8	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	2.5	J	0.069	MDL	5.8	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.32	J	0.043	MDL	5.8	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	1.3	C J	0.064	MDL	5.8	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.21	Q J	0.089	MDL	5.8	MRL	ng/kg	J	Z
2,3,4,6,7,8-HXCDF	0.29	B J	0.038	MDL	5.8	MRL	ng/kg	U	B
2,3,4,7,8-PECDF	0.098	Q J	0.062	MDL	5.8	MRL	ng/kg	J	Z
2,3,7,8-TCDF	0.14	Q J	0.081	MDL	1.2	MRL	ng/kg	J	Z

Sample ID: **SL-674-SA6-SB-2.5-3.5** ***Collected:*** **12/3/2012 1:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.3	Q B J	0.17	MDL	5.7	MRL	ng/kg	U	B
1,2,3,4,7,8-HxCDD	0.71	Q J	0.11	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,4,7,8-HXCDF	1.6	C J	0.077	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDD	2.1	Q J	0.11	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,6,7,8-HXCDF	0.88	Q J	0.077	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,7,8,9-HXCDD	2.1	C J	0.10	MDL	5.7	MRL	ng/kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-674-SA6-SB-2.5-3.5 **Collected:** 12/3/2012 1:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.28	Q J	0.14	MDL	5.7	MRL	ng/kg	J	Z
1,2,3,7,8-PECDF	0.36	B J	0.16	MDL	5.7	MRL	ng/kg	U	B
2,3,4,6,7,8-HXCDF	0.48	B J	0.074	MDL	5.7	MRL	ng/kg	U	B
2,3,4,7,8-PECDF	0.61	Q J	0.14	MDL	5.7	MRL	ng/kg	J	Z

Sample ID: SL-971-SA6-SB-4.0-5.0 **Collected:** 12/3/2012 9:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.63	J	0.066	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.063	Q B J	0.047	MDL	5.2	MRL	ng/kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.066	U	0.066	MDL	5.2	MRL	ng/kg	UJ	FD
1,2,3,4,7,8-HXCDF	0.040	U	0.040	MDL	5.2	MRL	ng/kg	UJ	FD
1,2,3,6,7,8-HXCDD	0.065	U	0.065	MDL	5.2	MRL	ng/kg	UJ	FD
1,2,3,6,7,8-HXCDF	0.041	U	0.041	MDL	5.2	MRL	ng/kg	UJ	FD
1,2,3,7,8,9-HXCDD	0.082	Q J	0.061	MDL	5.2	MRL	ng/kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.078	Q J	0.054	MDL	5.2	MRL	ng/kg	J	Z
1,2,3,7,8-PECDD	0.099	U	0.099	MDL	5.2	MRL	ng/kg	UJ	FD
1,2,3,7,8-PECDF	0.065	U	0.065	MDL	5.2	MRL	ng/kg	UJ	FD
2,3,4,7,8-PECDF	0.063	U	0.063	MDL	5.2	MRL	ng/kg	UJ	FD
2,3,7,8-TCDD	0.17	U	0.17	MDL	1.0	MRL	ng/kg	UJ	FD
OCDD	10	B J	0.077	MDL	10	MRL	ng/kg	J	FD
OCDF	0.34	B J	0.074	MDL	10	MRL	ng/kg	UJ	B, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
*XI	Exceeded Calibration Range
A	Professional Judgment
B	Method Blank Contamination
FD	Field Duplicate Precision
I	Internal Standard Estimation
Q	Matrix Spike Lower Rejection
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36535-2/
H2L060414

TestAmerica Denver

Client Sample ID: SL-559-SA6-SB-0.0-0.5

Dioxins/Furans, HRGC/HRMS (1613B)

Lot - Sample #....:	H2L060414 - 008	Work Order #....:	MXHH41AC	Matrix.....:	SO
Date Sampled....:	12/03/12	Date Received....:	12/06/12	Units....:	ng/kg
Prep Date....:	12/07/12			Dilution Factor:	2
Prep Batch # ....:	2342010			Percent Moisture:	9.1
Initial Wgt/Vol :	10 g	Instrument ID....:	M2A	Method....:	EPA-5 1613B
Analyst ID....:	Patricia(Trish) M. Parsly				

PARAMETER	ANALYSIS DATE	DILUTION FACTOR	RESULT	MINIMUM LEVEL	ESTIMATED DETECTION LIMIT	WHO 2005 TEF FACTOR	TEQ CONC.
2,3,7,8-TCDD	12/21/12	2	ND	2.2	0.71	1.0	0
1,2,3,7,8-PeCDD	**12/21/12**	**2**	**1.3 Q J**	**11**	**0.56**	**1.0**	**1.3**
1,2,3,4,7,8-HxCDD	**12/21/12**	**2**	**2.3 Q J**	**11**	**0.50**	**0.1**	**0.23**
1,2,3,6,7,8-HxCDD	**12/21/12**	**2**	**8.3 J**	**11**	**0.51**	**0.1**	**0.83**
1,2,3,7,8,9-HxCDD	**12/21/12**	**2**	**6.8 J C**	**11**	**0.48**	**0.1**	**0.68**
1,2,3,4,6,7,8-HpCDD	**12/21/12**	**2**	**200**	**11**	**0.72**	**0.01**	**2.0**
OCDD	**12/21/12**	**2**	**2500 B**	**22**	**1.8**	**0.0003**	**0.75**
2,3,7,8-TCDF	**12/21/12**	**2**	**0.81 Q J**	**2.2**	**0.46**	**0.1**	**0.081**
1,2,3,7,8-PeCDF	12/21/12	2	ND	11	0.53	0.03	0
2,3,4,7,8-PeCDF	**12/21/12**	**2**	**0.65 Q J**	**11**	**0.39**	**0.3**	**0.20**
1,2,3,4,7,8-HxCDF	**12/21/12**	**2**	**1.1 Q J**	**11**	**0.33**	**0.1**	**0.11**
1,2,3,6,7,8-HxCDF	**12/21/12**	**2**	**1.7 J**	**11**	**0.35**	**0.1**	**0.17**
2,3,4,6,7,8-HxCDF	**12/21/12**	**2**	**0.75 Q B J**	**11**	**0.36**	**0.1**	**0.075**
1,2,3,7,8,9-HxCDF	12/21/12	2	ND	11	0.46	0.1	0
1,2,3,4,6,7,8-HpCDF	**12/21/12**	**2**	**13 B**	**11**	**0.54**	**0.01**	**0.13**
1,2,3,4,7,8,9-HpCDF	**12/21/12**	**2**	**2.6 B J**	**11**	**0.63**	**0.01**	**0.026**
OCDF	**12/21/12**	**2**	**23 B**	**22**	**0.87**	**0.0003**	**0.0069**
Total TEQ Concentration							6.6

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	40	(25 - 164)
13C-1,2,3,7,8-PeCDD	46	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	42	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	30	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	34	(23 - 140)
13C-OCDD	16 * J/UJ/P OCDD & OCDF	(17 - 157)
13C-2,3,7,8-TCDF	42	(24 - 169)
13C-1,2,3,7,8-PeCDF	44	(24 - 185)
13C-2,3,4,7,8-PeCDF	46	(21 - 178)
13C-1,2,3,4,7,8-HxCDF	46	(26 - 152)
13C-1,2,3,6,7,8-HxCDF	30	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	36	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	34	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	25 * J/UJ/P 1,2,3,4,6,7,8-HpCDF	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	24 * J/UJ/P 1,2,3,4,7,8,9-HpCDF	(26 - 138)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	47	(35 - 197)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-571-SA6-SB-4.0-5.0MS **SL-571-SA6-SB-4.0-5.0MSD** (SL-571-SA6-SB-4.0-5.0)	OCDD	0	0	40.00-135.00	-	OCDD	J (all detects) R (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
H2L070000010B	12/21/2012 3:36:00 AM	1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF OCDD OCDF	0.29 ng/kg 0.31 ng/kg 0.12 ng/kg 0.11 ng/kg 1.6 ng/kg 0.75 ng/kg	SL-559-SA6-SB-0.0-0.5 SL-559-SA6-SB-4.0-5.0 SL-571-SA6-SB-4.0-5.0 SL-572-SA6-SB-0.0-0.5 SL-572-SA6-SB-2.5-3.5 SL-574-SA6-SB-0.0-0.5 SL-574-SA6-SB-2.5-3.5 SL-664-SA6-SB-2.0-3.0 SL-672-SA6-SB-4.0-5.0 SL-674-SA6-SB-2.5-3.5 SL-971-SA6-SB-4.0-5.0
H2L100000027B	12/21/2012 12:59:00 AM	OCDD	0.47 ng/kg	SL-571-SA6-SB-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-559-SA6-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.18 ng/kg	0.18U ng/kg
SL-559-SA6-SB-4.0-5.0(RES)	OCDD	4.5 ng/kg	4.5U ng/kg
SL-571-SA6-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.32 ng/kg	0.32U ng/kg
SL-571-SA6-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.019 ng/kg	0.019U ng/kg
SL-571-SA6-SB-4.0-5.0(RES)	OCDF	2.2 ng/kg	2.2U ng/kg
SL-572-SA6-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.50 ng/kg	0.50U ng/kg
SL-572-SA6-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.043 ng/kg	0.043U ng/kg
SL-572-SA6-SB-2.5-3.5(RES)	OCDD	2.3 ng/kg	2.3U ng/kg
SL-572-SA6-SB-2.5-3.5(RES)	OCDF	0.23 ng/kg	0.23U ng/kg
SL-574-SA6-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.43 ng/kg	0.43U ng/kg
SL-574-SA6-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.14 ng/kg	0.14U ng/kg
SL-574-SA6-SB-2.5-3.5(RES)	OCDF	0.78 ng/kg	0.78U ng/kg
SL-664-SA6-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.50 ng/kg	0.50U ng/kg
SL-664-SA6-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.44 ng/kg	0.44U ng/kg
SL-672-SA6-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	1.2 ng/kg	1.2U ng/kg
SL-672-SA6-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.29 ng/kg	0.29U ng/kg
SL-674-SA6-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	1.3 ng/kg	1.3U ng/kg
SL-674-SA6-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.36 ng/kg	0.36U ng/kg
SL-674-SA6-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.48 ng/kg	0.48U ng/kg
SL-971-SA6-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.063 ng/kg	0.063U ng/kg
SL-971-SA6-SB-4.0-5.0(RES)	OCDF	0.34 ng/kg	0.34U ng/kg

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-559-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	B J	2.6	11	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	Q J	2.3	11	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	1.1	11	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	8.3	11	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	1.7	11	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J C	6.8	11	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	1.3	11	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q B J	0.75	11	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.65	11	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.81	2.2	MRL	ng/kg	
SL-559-SA6-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	Q J	0.38	5.2	MRL	ng/kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	Q B J	0.18	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.14	5.2	MRL	ng/kg	
	OCDD	B J	4.5	10	MRL	ng/kg	
SL-571-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	J	0.28	5.3	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	3.4	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.45	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.21	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	1.8	5.3	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q J	0.16	5.3	MRL	ng/kg	
SL-571-SA6-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	Q B J	0.32	5.2	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.11	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	J	0.098	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	Q J	0.32	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	0.048	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	J	0.32	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.050	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.062	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q B J	0.019	5.2	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.056	5.2	MRL	ng/kg	
	2,3,7,8-TCDD	Q J	0.10	1.0	MRL	ng/kg	
	OCDF	B J	2.2	10	MRL	ng/kg	
SL-572-SA6-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	B J	1.6	5.7	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HXCDF	C J	2.8	5.7	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.64	5.7	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.15	5.7	MRL	ng/kg	
	1,2,3,7,8-PECDD	J	3.8	5.7	MRL	ng/kg	
	1,2,3,7,8-PECDF	B J	0.50	5.7	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	B J	0.72	5.7	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.49	5.7	MRL	ng/kg	
	2,3,7,8-TCDD	Q J	0.36	1.1	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.40	1.1	MRL	ng/kg	
SL-572-SA6-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	J	0.19	5.2	MRL	ng/kg	J (all detects)
	2,3,4,6,7,8-HXCDF	Q B J	0.043	5.2	MRL	ng/kg	
	OCDD	B J	2.3	10	MRL	ng/kg	
	OCDF	B J	0.23	10	MRL	ng/kg	
SL-574-SA6-SB-0.0-0.5	1,2,3,7,8,9-HXCDF	J	0.75	5.5	MRL	ng/kg	J (all detects)
	1,2,3,7,8-PECDD	Q J	4.8	5.5	MRL	ng/kg	
	1,2,3,7,8-PECDF	Q B J	2.3	5.5	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	Q B J	3.8	5.5	MRL	ng/kg	

Field Duplicate RPD Report

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/kg)		Sample RPD	eQAPP RPD	Flag
	SL-571-SA6-SB-4.0-5.0	SL-971-SA6-SB-4.0-5.0			
1,2,3,7,8,9-HXCDF	0.050	0.078	44	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDD	8.4	0.63	172	50.00	
1,2,3,4,6,7,8-HPCDF	0.32	0.063	134	50.00	
1,2,3,4,7,8-HxCDD	0.11	5.2 U	200	50.00	
1,2,3,4,7,8-HXCDF	0.098	5.2 U	200	50.00	
1,2,3,6,7,8-HXCDD	0.32	5.2 U	200	50.00	
1,2,3,6,7,8-HXCDF	0.048	5.2 U	200	50.00	J(all detects) UJ(all non-detects)
1,2,3,7,8,9-HXCDD	0.32	0.082	118	50.00	
1,2,3,7,8-PECDD	0.062	5.2 U	200	50.00	
1,2,3,7,8-PECDF	0.019	5.2 U	200	50.00	
2,3,4,7,8-PECDF	0.056	5.2 U	200	50.00	
2,3,7,8-TCDD	0.10	1.0 U	200	50.00	
OCDD	270	10	186	50.00	
OCDF	2.2	0.34	146	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36535-2 **Laboratory: TA DEN**

EDD Filename: 280-36535-2 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-574-SA6-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDF	B J	0.43	5.2	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	Q B J	0.14	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HxCDD	Q J	0.14	5.2	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.21	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	0.41	5.2	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	0.17	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	Q J	0.50	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.077	5.2	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.13	5.2	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.059	1.0	MRL	ng/kg	
	OCDF	B J	0.78	10	MRL	ng/kg	
SL-664-SA6-SB-2.0-3.0	1,2,3,4,7,8,9-HPCDF	Q B J	1.6	5.3	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.60	5.3	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	1.3	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	1.9	5.3	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.61	5.3	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	Q J	1.5	5.3	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.15	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.42	5.3	MRL	ng/kg	
	1,2,3,7,8-PECDF	B J	0.50	5.3	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	B J	0.44	5.3	MRL	ng/kg	
	2,3,4,7,8-PECDF	J	0.60	5.3	MRL	ng/kg	
	2,3,7,8-TCDF	J	0.75	1.1	MRL	ng/kg	
SL-672-SA6-SB-4.0-5.0	1,2,3,4,7,8,9-HPCDF	B J	1.2	5.8	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.49	5.8	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	Q J	0.47	5.8	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	J	2.5	5.8	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	J	0.32	5.8	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	1.3	5.8	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.21	5.8	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	B J	0.29	5.8	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.098	5.8	MRL	ng/kg	
	2,3,7,8-TCDF	Q J	0.14	1.2	MRL	ng/kg	
SL-674-SA6-SB-2.5-3.5	1,2,3,4,7,8,9-HPCDF	Q B J	1.3	5.7	MRL	ng/kg	J (all detects)
	1,2,3,4,7,8-HxCDD	Q J	0.71	5.7	MRL	ng/kg	
	1,2,3,4,7,8-HXCDF	C J	1.6	5.7	MRL	ng/kg	
	1,2,3,6,7,8-HXCDD	Q J	2.1	5.7	MRL	ng/kg	
	1,2,3,6,7,8-HXCDF	Q J	0.88	5.7	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	C J	2.1	5.7	MRL	ng/kg	
	1,2,3,7,8-PECDD	Q J	0.28	5.7	MRL	ng/kg	
	1,2,3,7,8-PECDF	B J	0.36	5.7	MRL	ng/kg	
	2,3,4,6,7,8-HXCDF	B J	0.48	5.7	MRL	ng/kg	
	2,3,4,7,8-PECDF	Q J	0.61	5.7	MRL	ng/kg	
SL-971-SA6-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	J	0.63	5.2	MRL	ng/kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	Q B J	0.063	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDD	Q J	0.082	5.2	MRL	ng/kg	
	1,2,3,7,8,9-HXCDF	Q J	0.078	5.2	MRL	ng/kg	
	OCDF	B J	0.34	10	MRL	ng/kg	

SAMPLE DELIVERY GROUP

280-36589-1

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Dec-2012	SL-532-SA6-SB-0.0-0.5	280-36589-6	N	3546	8270C SIM	IV
04-Dec-2012	SL-532-SA6-SB-0.0-0.5	280-36589-6	N	3550C	8015B EFH	IV
04-Dec-2012	SL-532-SA6-SB-0.0-0.5MS	280-36589-6MS	MS	3550C	8015B EFH	IV
04-Dec-2012	SL-532-SA6-SB-0.0-0.5MSD	280-36589-6MSD	MSD	3550C	8015B EFH	IV
04-Dec-2012	SL-532-SA6-SB-0.0-0.5	280-36589-7	N	3050B	6010C	IV
04-Dec-2012	SL-532-SA6-SB-0.0-0.5	280-36589-7	N	3050B	6020A	IV
04-Dec-2012	SL-532-SA6-SB-0.0-0.5	280-36589-7	N	3546	8082A	IV
04-Dec-2012	SL-532-SA6-SB-0.0-0.5	280-36589-7	N	7471B	7471B	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5	280-36589-15	N	3546	8270C SIM	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5	280-36589-15	N	3550C	8015B EFH	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5	280-36589-16	N	3050B	6010C	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5	280-36589-16	N	3050B	6020A	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5	280-36589-16	N	3546	8081B	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5	280-36589-16	N	3546	8082A	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5	280-36589-16	N	7471B	7471B	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5	280-36589-16	N	8151A	8151A	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5MS	280-36589-16MS	MS	3546	8081B	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5MS	280-36589-16MS	MS	3546	8082A	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5MSD	280-36589-16MSD	MSD	3546	8081B	IV
04-Dec-2012	SL-626-SA6-SB-0.0-0.5MSD	280-36589-16MSD	MSD	3546	8082A	IV
04-Dec-2012	TB-120412	280-36589-1	TB	METHOD	8015B GRO	IV
04-Dec-2012	SL-531-SA6-SB-0.0-0.5	280-36589-4	N	3546	8270C SIM	IV
04-Dec-2012	SL-531-SA6-SB-0.0-0.5	280-36589-4	N	3550C	8015B EFH	IV
04-Dec-2012	SL-531-SA6-SB-0.0-0.5	280-36589-5	N	3050B	6010C	IV
04-Dec-2012	SL-531-SA6-SB-0.0-0.5	280-36589-5	N	3050B	6020A	IV
04-Dec-2012	SL-531-SA6-SB-0.0-0.5	280-36589-5	N	3546	8082A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Dec-2012	SL-531-SA6-SB-0.0-0.5	280-36589-5	N	7471B	7471B	IV
04-Dec-2012	SL-627-SA6-SB-0.0-0.5	280-36589-17	N	3546	8270C SIM	IV
04-Dec-2012	SL-627-SA6-SB-0.0-0.5	280-36589-17	N	3550C	8015B EFH	IV
04-Dec-2012	SL-627-SA6-SB-0.0-0.5	280-36589-18	N	3050B	6010C	IV
04-Dec-2012	SL-627-SA6-SB-0.0-0.5	280-36589-18	N	3050B	6020A	IV
04-Dec-2012	SL-627-SA6-SB-0.0-0.5	280-36589-18	N	3546	8082A	IV
04-Dec-2012	SL-627-SA6-SB-0.0-0.5	280-36589-18	N	7471B	7471B	IV
04-Dec-2012	SL-533-SA6-SB-0.0-0.5	280-36589-8	N	3546	8270C SIM	IV
04-Dec-2012	SL-533-SA6-SB-0.0-0.5	280-36589-8	N	3550C	8015B EFH	IV
04-Dec-2012	SL-533-SA6-SB-0.0-0.5	280-36589-9	N	3050B	6010C	IV
04-Dec-2012	SL-533-SA6-SB-0.0-0.5	280-36589-9	N	3050B	6020A	IV
04-Dec-2012	SL-533-SA6-SB-0.0-0.5	280-36589-9	N	3546	8082A	IV
04-Dec-2012	SL-533-SA6-SB-0.0-0.5	280-36589-9	N	7471B	7471B	IV
04-Dec-2012	SL-627-SA6-SB-1.0-2.0	280-36589-19	N	3546	8270C SIM	IV
04-Dec-2012	SL-627-SA6-SB-1.0-2.0	280-36589-19	N	3550C	8015B EFH	IV
04-Dec-2012	SL-627-SA6-SB-1.0-2.0	280-36589-20	N	3050B	6010C	IV
04-Dec-2012	SL-627-SA6-SB-1.0-2.0	280-36589-20	N	3050B	6020A	IV
04-Dec-2012	SL-627-SA6-SB-1.0-2.0	280-36589-20	N	3546	8082A	IV
04-Dec-2012	SL-627-SA6-SB-1.0-2.0	280-36589-20	N	7471B	7471B	IV
04-Dec-2012	SL-627-SA6-SB-1.5	280-36589-21	N	5035	8015B GRO	IV
04-Dec-2012	SL-534-SA6-SB-0.0-0.5	280-36589-10	N	3546	8270C SIM	IV
04-Dec-2012	SL-534-SA6-SB-0.0-0.5	280-36589-10	N	3550C	8015B EFH	IV
04-Dec-2012	SL-534-SA6-SB-0.0-0.5	280-36589-11	N	3050B	6010C	IV
04-Dec-2012	SL-534-SA6-SB-0.0-0.5	280-36589-11	N	3050B	6020A	IV
04-Dec-2012	SL-534-SA6-SB-0.0-0.5	280-36589-11	N	3546	8082A	IV
04-Dec-2012	SL-534-SA6-SB-0.0-0.5	280-36589-11	N	7471B	7471B	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Dec-2012	SL-534-SA6-SB-3.5	280-36589-14	N	5035	8015B GRO	IV
04-Dec-2012	SL-534-SA6-SB-3.0-4.0	280-36589-12	N	3546	8270C SIM	IV
04-Dec-2012	SL-534-SA6-SB-3.0-4.0	280-36589-12	N	3550C	8015B EFH	IV
04-Dec-2012	SL-534-SA6-SB-3.0-4.0	280-36589-13	N	3050B	6010C	IV
04-Dec-2012	SL-534-SA6-SB-3.0-4.0	280-36589-13	N	3050B	6020A	IV
04-Dec-2012	SL-534-SA6-SB-3.0-4.0	280-36589-13	N	3546	8082A	IV
04-Dec-2012	SL-534-SA6-SB-3.0-4.0	280-36589-13	N	7471B	7471B	IV
04-Dec-2012	SL-529-SA6-SB-0.0-0.5	280-36589-2	N	3546	8270C SIM	IV
04-Dec-2012	SL-529-SA6-SB-0.0-0.5	280-36589-2	N	3550C	8015B EFH	IV
04-Dec-2012	SL-529-SA6-SB-0.0-0.5	280-36589-3	N	3050B	6010C	IV
04-Dec-2012	SL-529-SA6-SB-0.0-0.5	280-36589-3	N	3050B	6020A	IV
04-Dec-2012	SL-529-SA6-SB-0.0-0.5	280-36589-3	N	3546	8082A	IV
04-Dec-2012	SL-529-SA6-SB-0.0-0.5	280-36589-3	N	7471B	7471B	IV
04-Dec-2012	SL-632-SA6-SB-0.0-0.5	280-36589-29	N	3546	8270C SIM	IV
04-Dec-2012	SL-632-SA6-SB-0.0-0.5	280-36589-29	N	3550C	8015B EFH	IV
04-Dec-2012	SL-632-SA6-SB-0.0-0.5	280-36589-30	N	3050B	6010C	IV
04-Dec-2012	SL-632-SA6-SB-0.0-0.5	280-36589-30	N	3050B	6020A	IV
04-Dec-2012	SL-632-SA6-SB-0.0-0.5	280-36589-30	N	3546	8081B	IV
04-Dec-2012	SL-632-SA6-SB-0.0-0.5	280-36589-30	N	3546	8082A	IV
04-Dec-2012	SL-632-SA6-SB-0.0-0.5	280-36589-30	N	7471B	7471B	IV
04-Dec-2012	SL-632-SA6-SB-0.0-0.5	280-36589-30	N	8151A	8151A	IV
04-Dec-2012	SL-631-SA6-SB-0.0-0.5	280-36589-27	N	3546	8270C SIM	IV
04-Dec-2012	SL-631-SA6-SB-0.0-0.5	280-36589-27	N	3550C	8015B EFH	IV
04-Dec-2012	SL-631-SA6-SB-0.0-0.5	280-36589-28	N	3050B	6010C	IV
04-Dec-2012	SL-631-SA6-SB-0.0-0.5	280-36589-28	N	3050B	6020A	IV
04-Dec-2012	SL-631-SA6-SB-0.0-0.5	280-36589-28	N	3546	8082A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Dec-2012	SL-631-SA6-SB-0.0-0.5	280-36589-28	N	7471B	7471B	IV
04-Dec-2012	SL-628-SA6-SB-0.0-0.5	280-36589-22	N	3546	8270C SIM	IV
04-Dec-2012	SL-628-SA6-SB-0.0-0.5	280-36589-22	N	3550C	8015B EFH	IV
04-Dec-2012	SL-628-SA6-SB-0.0-0.5	280-36589-23	N	3050B	6010C	IV
04-Dec-2012	SL-628-SA6-SB-0.0-0.5	280-36589-23	N	3050B	6020A	IV
04-Dec-2012	SL-628-SA6-SB-0.0-0.5	280-36589-23	N	3546	8081B	IV
04-Dec-2012	SL-628-SA6-SB-0.0-0.5	280-36589-23	N	3546	8082A	IV
04-Dec-2012	SL-628-SA6-SB-0.0-0.5	280-36589-23	N	7471B	7471B	IV
04-Dec-2012	SL-628-SA6-SB-0.0-0.5	280-36589-23	N	8151A	8151A	IV
04-Dec-2012	SL-628-SA6-SB-4.0-5.0	280-36589-24	N	3546	8270C SIM	IV
04-Dec-2012	SL-628-SA6-SB-4.0-5.0	280-36589-24	N	3550C	8015B EFH	IV
04-Dec-2012	SL-628-SA6-SB-4.0-5.0	280-36589-25	N	3050B	6010C	IV
04-Dec-2012	SL-628-SA6-SB-4.0-5.0	280-36589-25	N	3050B	6020A	IV
04-Dec-2012	SL-628-SA6-SB-4.0-5.0	280-36589-25	N	3546	8081B	IV
04-Dec-2012	SL-628-SA6-SB-4.0-5.0	280-36589-25	N	3546	8082A	IV
04-Dec-2012	SL-628-SA6-SB-4.0-5.0	280-36589-25	N	7471B	7471B	IV
04-Dec-2012	SL-628-SA6-SB-4.0-5.0	280-36589-25	N	8151A	8151A	IV
04-Dec-2012	SL-628-SA6-SB-4.5	280-36589-26	N	5035	8015B GRO	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5	280-36589-45	N	3546	8270C SIM	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5	280-36589-45	N	3550C	8015B EFH	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5	280-36589-46	N	3050B	6010C	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5	280-36589-46	N	3050B	6020A	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5	280-36589-46	N	3546	8082A	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5	280-36589-46	N	7471B	7471B	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5MS	280-36589-46MS	MS	3050B	6010C	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5MS	280-36589-46MS	MS	3050B	6020A	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Dec-2012	SL-549-SA6-SB-0.0-0.5MS	280-36589-46MS	MS	7471B	7471B	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5MSD	280-36589-46MSD	MSD	3050B	6010C	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5MSD	280-36589-46MSD	MSD	3050B	6020A	IV
04-Dec-2012	SL-549-SA6-SB-0.0-0.5MSD	280-36589-46MSD	MSD	7471B	7471B	IV
04-Dec-2012	SL-629-SA6-SB-0.0-0.5	280-36589-31	N	3546	8270C SIM	IV
04-Dec-2012	SL-629-SA6-SB-0.0-0.5	280-36589-31	N	3550C	8015B EFH	IV
04-Dec-2012	SL-629-SA6-SB-0.0-0.5	280-36589-32	N	3050B	6010C	IV
04-Dec-2012	SL-629-SA6-SB-0.0-0.5	280-36589-32	N	3050B	6020A	IV
04-Dec-2012	SL-629-SA6-SB-0.0-0.5	280-36589-32	N	3546	8082A	IV
04-Dec-2012	SL-629-SA6-SB-0.0-0.5	280-36589-32	N	7471B	7471B	IV
04-Dec-2012	SL-536-SA6-SB-0.0-0.5	280-36589-38	N	3546	8270C SIM	IV
04-Dec-2012	SL-536-SA6-SB-0.0-0.5	280-36589-38	N	3550C	8015B EFH	IV
04-Dec-2012	SL-536-SA6-SB-0.0-0.5	280-36589-39	N	3050B	6010C	IV
04-Dec-2012	SL-536-SA6-SB-0.0-0.5	280-36589-39	N	3050B	6020A	IV
04-Dec-2012	SL-536-SA6-SB-0.0-0.5	280-36589-39	N	3546	8082A	IV
04-Dec-2012	SL-536-SA6-SB-0.0-0.5	280-36589-39	N	7471B	7471B	IV
04-Dec-2012	SL-629-SA6-SB-2.5-3.5	280-36589-33	N	3546	8270C SIM	IV
04-Dec-2012	SL-629-SA6-SB-2.5-3.5	280-36589-33	N	3550C	8015B EFH	IV
04-Dec-2012	SL-629-SA6-SB-2.5-3.5	280-36589-34	N	3050B	6010C	IV
04-Dec-2012	SL-629-SA6-SB-2.5-3.5	280-36589-34	N	3050B	6020A	IV
04-Dec-2012	SL-629-SA6-SB-2.5-3.5	280-36589-34	N	3546	8082A	IV
04-Dec-2012	SL-629-SA6-SB-2.5-3.5	280-36589-34	N	7471B	7471B	IV
04-Dec-2012	SL-629-SA6-SB-3.0	280-36589-35	N	5035	8015B GRO	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5	280-36589-40	N	3060A	7199	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5	280-36589-40	N	3546	8270C SIM	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5	280-36589-40	N	3550C	8015B EFH	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Dec-2012	SL-546-SA6-SB-0.0-0.5	280-36589-41	N	3050B	6010C	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5	280-36589-41	N	3050B	6020A	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5	280-36589-41	N	3546	8082A	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5	280-36589-41	N	7471B	7471B	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5	280-36589-41	N	8315A Prep	8315A	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5MS	280-36589-41MS	MS	8315A Prep	8315A	IV
04-Dec-2012	SL-546-SA6-SB-0.0-0.5MSD	280-36589-41MSD	MSD	8315A Prep	8315A	IV
04-Dec-2012	SL-630-SA6-SB-0.0-0.5	280-36589-36	N	3546	8270C SIM	IV
04-Dec-2012	SL-630-SA6-SB-0.0-0.5	280-36589-36	N	3550C	8015B EFH	IV
04-Dec-2012	SL-630-SA6-SB-0.0-0.5	280-36589-37	N	3050B	6010C	IV
04-Dec-2012	SL-630-SA6-SB-0.0-0.5	280-36589-37	N	3050B	6020A	IV
04-Dec-2012	SL-630-SA6-SB-0.0-0.5	280-36589-37	N	3546	8081B	IV
04-Dec-2012	SL-630-SA6-SB-0.0-0.5	280-36589-37	N	3546	8082A	IV
04-Dec-2012	SL-630-SA6-SB-0.0-0.5	280-36589-37	N	7471B	7471B	IV
04-Dec-2012	SL-630-SA6-SB-0.0-0.5	280-36589-37	N	8151A	8151A	IV
04-Dec-2012	SL-546-SA6-SB-7.0	280-36589-44	N	5035	8015B GRO	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5	280-36589-42	N	3060A	7199	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5	280-36589-42	N	3546	8270C SIM	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5	280-36589-42	N	3550C	8015B EFH	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5MS	280-36589-42MS	MS	3546	8270C SIM	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5MSD	280-36589-42MSD	MSD	3546	8270C SIM	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5	280-36589-43	N	3050B	6010C	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5	280-36589-43	N	3050B	6020A	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5	280-36589-43	N	3546	8082A	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5	280-36589-43	N	7471B	7471B	IV
04-Dec-2012	SL-546-SA6-SB-6.5-7.5	280-36589-43	N	8315A Prep	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*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-529-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 9:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ALUMINUM	13000	J	1.7	MDL	22000	MRL	mg/Kg	J	Z
BORON	1.5	J	1.1	MDL	11	MRL	mg/Kg	U	F
LITHIUM	24	J	0.33	MDL	41	MRL	mg/Kg	J	Z, A
MANGANESE	230	J	0.11	MDL	540	MRL	mg/Kg	J	Z
POTASSIUM	2900	J	45	MDL	7000	MRL	mg/Kg	J	Z
SODIUM	130	J	65	MDL	550	MRL	mg/Kg	J	Z
TIN	3.3	J	1.0	MDL	12	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.39	MDL	9.5	MRL	mg/Kg	J	Z

Sample ID: **SL-531-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 8:10:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ALUMINUM	10000	J	1.8	MDL	23000	MRL	mg/Kg	J	Z
LITHIUM	25	J	0.35	MDL	43	MRL	mg/Kg	J	Z, A
MANGANESE	240	J	0.12	MDL	580	MRL	mg/Kg	J	Z
POTASSIUM	2800	J	48	MDL	7500	MRL	mg/Kg	J	Z
SODIUM	79	J	69	MDL	580	MRL	mg/Kg	U	F
TIN	3.3	J	1.1	MDL	13	MRL	mg/Kg	J	Z
Zirconium	1.1	J	0.41	MDL	10	MRL	mg/Kg	J	Z

Sample ID: **SL-532-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 7:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ALUMINUM	12000	J	1.8	MDL	23000	MRL	mg/Kg	J	Z
BORON	2.1	J	1.1	MDL	11	MRL	mg/Kg	U	F
LITHIUM	19	J	0.34	MDL	42	MRL	mg/Kg	J	Z, A
MANGANESE	270	J	0.11	MDL	570	MRL	mg/Kg	J	Z
POTASSIUM	2800	J	47	MDL	7300	MRL	mg/Kg	J	Z
SODIUM	130	J	68	MDL	570	MRL	mg/Kg	J	Z
TIN	3.6	J	1.0	MDL	12	MRL	mg/Kg	J	Z
Zirconium	1.2	J	0.41	MDL	9.9	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: SL-533-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 8:40:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
BORON	1.6	J	1.0	MDL	10	MRL	mg/Kg	U	F
LITHIUM	27	J	0.31	MDL	39	MRL	mg/Kg	J	Z, A
MANGANESE	320	J	0.10	MDL	520	MRL	mg/Kg	J	Z
POTASSIUM	3600	J	43	MDL	6700	MRL	mg/Kg	J	Z
SODIUM	76	J	62	MDL	520	MRL	mg/Kg	U	F
TIN	3.2	J	0.95	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.37	MDL	9.0	MRL	mg/Kg	J	Z

Sample ID: SL-534-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 9:05:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.7	MDL	22000	MRL	mg/Kg	J	Z
BORON	1.8	J	1.1	MDL	11	MRL	mg/Kg	U	F
LITHIUM	25	J	0.33	MDL	40	MRL	mg/Kg	J	Z, A
MANGANESE	300	J	0.11	MDL	540	MRL	mg/Kg	J	Z
POTASSIUM	3300	J	45	MDL	7000	MRL	mg/Kg	J	Z
SODIUM	100	J	64	MDL	540	MRL	mg/Kg	J	Z
TIN	3.6	J	0.99	MDL	12	MRL	mg/Kg	J	Z
Zirconium	1.5	J	0.39	MDL	9.4	MRL	mg/Kg	J	Z

Sample ID: SL-534-SA6-SB-3.0-4.0 **Collected:** 12/4/2012 9:15:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.1	J	0.92	MDL	9.1	MRL	mg/Kg	U	F
LITHIUM	26	J	0.28	MDL	35	MRL	mg/Kg	J	Z, A
MANGANESE	150	J	0.094	MDL	460	MRL	mg/Kg	J	Z
POTASSIUM	2000	J	38	MDL	6000	MRL	mg/Kg	J	Z
SODIUM	200	J	55	MDL	470	MRL	mg/Kg	J	Z
TIN	3.5	J	0.86	MDL	10	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.33	MDL	8.1	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-536-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 1:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
LITHIUM	16	J	0.31	MDL	38	MRL	mg/Kg	J	Z, A
MANGANESE	170	J	0.10	MDL	500	MRL	mg/Kg	J	Z
POTASSIUM	2300	J	42	MDL	6500	MRL	mg/Kg	J	Z
SODIUM	170	J	60	MDL	510	MRL	mg/Kg	J	Z
TIN	4.1	J	0.93	MDL	11	MRL	mg/Kg	J	Z
Zirconium	0.86	J	0.36	MDL	8.8	MRL	mg/Kg	J	Z

Sample ID: **SL-546-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 2:10:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	9400	J	1.4	MDL	18000	MRL	mg/Kg	J	Z
LITHIUM	22	J	0.27	MDL	34	MRL	mg/Kg	J	Z, A
MANGANESE	210	J	0.091	MDL	450	MRL	mg/Kg	J	Z
POTASSIUM	2600	J	37	MDL	5800	MRL	mg/Kg	J	Z
SODIUM	100	J	54	MDL	450	MRL	mg/Kg	J	Z
TIN	3.4	J	0.83	MDL	9.9	MRL	mg/Kg	J	Z
Zirconium	0.74	J	0.32	MDL	7.8	MRL	mg/Kg	J	Z

Sample ID: **SL-546-SA6-SB-6.5-7.5** ***Collected:*** **12/4/2012 2:35:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
LITHIUM	9.7	J	0.32	MDL	39	MRL	mg/Kg	J	Z, A
MANGANESE	110	J	0.11	MDL	520	MRL	mg/Kg	J	Z
POTASSIUM	2400	J	43	MDL	6700	MRL	mg/Kg	J	Z
SODIUM	150	J	62	MDL	530	MRL	mg/Kg	J	Z
TIN	3.6	J	0.96	MDL	11	MRL	mg/Kg	J	Z
Zirconium	0.91	J	0.37	MDL	9.1	MRL	mg/Kg	J	Z

Sample ID: **SL-549-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 12:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	9700	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
LITHIUM	24	J	0.31	MDL	39	MRL	mg/Kg	J	Z, A

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-549-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 12:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	240	J	0.10	MDL	520	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	43	MDL	6700	MRL	mg/Kg	J	Z
SODIUM	100	J	62	MDL	520	MRL	mg/Kg	J	Z
TIN	3.5	J	0.96	MDL	11	MRL	mg/Kg	J	Z
Zirconium	0.86	J	0.37	MDL	9.0	MRL	mg/Kg	J	Z

Sample ID: **SL-626-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 7:50:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.3	J	0.96	MDL	9.5	MRL	mg/Kg	U	F
LITHIUM	25	J	0.29	MDL	36	MRL	mg/Kg	J	Z, A
MANGANESE	320	J	0.098	MDL	480	MRL	mg/Kg	J	Z
POTASSIUM	3300	J	40	MDL	6200	MRL	mg/Kg	J	Z
SODIUM	91	J	58	MDL	490	MRL	mg/Kg	U	F
TIN	3.4	J	0.89	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.2	J	0.35	MDL	8.4	MRL	mg/Kg	J	Z

Sample ID: **SL-627-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 8:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	9800	J	1.7	MDL	22000	MRL	mg/Kg	J	Z
BORON	1.3	J	1.1	MDL	11	MRL	mg/Kg	U	F
LITHIUM	20	J	0.33	MDL	40	MRL	mg/Kg	J	Z, A
MANGANESE	240	J	0.11	MDL	540	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	45	MDL	7000	MRL	mg/Kg	J	Z
SODIUM	82	J	64	MDL	540	MRL	mg/Kg	U	F
TIN	3.0	J	0.99	MDL	12	MRL	mg/Kg	J	Z
Zirconium	1.2	J	0.39	MDL	9.4	MRL	mg/Kg	J	Z

Sample ID: **SL-627-SA6-SB-1.0-2.0** ***Collected:*** **12/4/2012 8:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	9900	J	1.5	MDL	19000	MRL	mg/Kg	J	Z
BORON	0.96	J	0.94	MDL	9.3	MRL	mg/Kg	U	F

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix:** SO

Sample ID: **SL-627-SA6-SB-1.0-2.0** ***Collected:*** **12/4/2012 8:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	20	J	0.29	MDL	35	MRL	mg/Kg	J	Z, A
MANGANESE	410	J	0.096	MDL	470	MRL	mg/Kg	J	Z
POTASSIUM	2600	J	39	MDL	6100	MRL	mg/Kg	J	Z
SODIUM	80	J	56	MDL	480	MRL	mg/Kg	U	F
TIN	2.8	J	0.87	MDL	10	MRL	mg/Kg	J	Z
Zirconium	1.1	J	0.34	MDL	8.2	MRL	mg/Kg	J	Z

Sample ID: **SL-628-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 11:00:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	10000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.7	J	0.99	MDL	9.8	MRL	mg/Kg	U	F
LITHIUM	19	J	0.30	MDL	38	MRL	mg/Kg	J	Z, A
MANGANESE	230	J	0.10	MDL	500	MRL	mg/Kg	J	Z
POTASSIUM	2700	J	42	MDL	6500	MRL	mg/Kg	J	Z
SODIUM	86	J	60	MDL	510	MRL	mg/Kg	U	F
TIN	2.9	J	0.92	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.2	J	0.36	MDL	8.7	MRL	mg/Kg	J	Z

Sample ID: **SL-628-SA6-SB-4.0-5.0** ***Collected:*** **12/4/2012 11:20:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	11000	J	1.5	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.3	J	0.97	MDL	9.6	MRL	mg/Kg	U	F
LITHIUM	31	J	0.30	MDL	37	MRL	mg/Kg	J	Z, A
MANGANESE	220	J	0.099	MDL	490	MRL	mg/Kg	J	Z
POTASSIUM	1900	J	41	MDL	6300	MRL	mg/Kg	J	Z
SODIUM	150	J	58	MDL	490	MRL	mg/Kg	J	Z
TIN	3.5	J	0.90	MDL	11	MRL	mg/Kg	J	Z
Zirconium	0.81	J	0.35	MDL	8.5	MRL	mg/Kg	J	Z

Sample ID: **SL-629-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 1:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14000	J	1.7	MDL	22000	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **SO**

Sample ID: **SL-629-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 1:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.8	J	1.1	MDL	11	MRL	mg/Kg	U	F
LITHIUM	23	J	0.34	MDL	41	MRL	mg/Kg	J	Z, A
MANGANESE	290	J	0.11	MDL	550	MRL	mg/Kg	J	Z
POTASSIUM	3500	J	46	MDL	7200	MRL	mg/Kg	J	Z
SODIUM	120	J	66	MDL	560	MRL	mg/Kg	U	F
TIN	3.9	J	1.0	MDL	12	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.40	MDL	9.6	MRL	mg/Kg	J	Z

Sample ID: **SL-629-SA6-SB-2.5-3.5** ***Collected:*** **12/4/2012 2:05:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
BORON	1.4	J	1.0	MDL	9.9	MRL	mg/Kg	U	F
LITHIUM	32	J	0.31	MDL	38	MRL	mg/Kg	J	Z, A
MANGANESE	230	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	3100	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	130	J	60	MDL	510	MRL	mg/Kg	U	F
TIN	3.7	J	0.93	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.5	J	0.36	MDL	8.8	MRL	mg/Kg	J	Z

Sample ID: **SL-630-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 2:25:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13000	J	1.7	MDL	22000	MRL	mg/Kg	J	Z
BORON	3.6	J	1.1	MDL	11	MRL	mg/Kg	U	F
LITHIUM	24	J	0.33	MDL	41	MRL	mg/Kg	J	Z, A
MANGANESE	320	J	0.11	MDL	540	MRL	mg/Kg	J	Z
POTASSIUM	3800	J	45	MDL	7000	MRL	mg/Kg	J	Z
SODIUM	75	J	65	MDL	550	MRL	mg/Kg	U	F
TIN	3.6	J	1.0	MDL	12	MRL	mg/Kg	J	Z
Zirconium	1.5	J	0.39	MDL	9.5	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6010C **Matrix: SO**

Sample ID: SL-631-SA6-SB-0.0-0.5 **Collected: 12/4/2012 10:20:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.6	MDL	20000	MRL	mg/Kg	J	Z
BORON	3.7	J	1.0	MDL	9.9	MRL	mg/Kg	U	F
LITHIUM	24	J	0.31	MDL	38	MRL	mg/Kg	J	Z, A
MANGANESE	400	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	4100	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	87	J	60	MDL	510	MRL	mg/Kg	U	F
TIN	3.7	J	0.93	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.4	J	0.36	MDL	8.8	MRL	mg/Kg	J	Z

Sample ID: SL-632-SA6-SB-0.0-0.5 **Collected: 12/4/2012 9:55:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12000	J	1.6	MDL	21000	MRL	mg/Kg	J	Z
BORON	1.6	J	1.0	MDL	10	MRL	mg/Kg	U	F
LITHIUM	23	J	0.31	MDL	38	MRL	mg/Kg	J	Z, A
MANGANESE	240	J	0.10	MDL	510	MRL	mg/Kg	J	Z
POTASSIUM	3600	J	42	MDL	6600	MRL	mg/Kg	J	Z
SODIUM	62	J	61	MDL	520	MRL	mg/Kg	U	F
TIN	3.5	J	0.94	MDL	11	MRL	mg/Kg	J	Z
Zirconium	1.2	J	0.37	MDL	8.9	MRL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-529-SA6-SB-0.0-0.5 **Collected: 12/4/2012 9:45:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.023	J	0.014	MDL	8.7	MRL	mg/Kg	J	Z, Q
ARSENIC	5.7	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	94	J	0.071	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.71	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.26	J	0.0094	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	17	J	0.076	MDL	37	MRL	mg/Kg	J	Z, Q
COBALT	6.3	J	0.0067	MDL	21	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: **SL-529-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 9:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	10	J	0.071	MDL	29	MRL	mg/Kg	J	Z
LEAD	11	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.018	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	12	J	0.025	MDL	29	MRL	mg/Kg	J	Z
SILVER	0.050	J	0.020	MDL	0.79	MRL	mg/Kg	U	F
THALLIUM	0.36	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	33	J	0.039	MDL	62	MRL	mg/Kg	J	Z
ZINC	68	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: **SL-531-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 8:10:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.020	J	0.014	MDL	8.6	MRL	mg/Kg	J	Z, Q
ARSENIC	4.3	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	68	J	0.069	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.45	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.16	J	0.0092	MDL	0.98	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.075	MDL	36	MRL	mg/Kg	J	Z, Q
COBALT	5.0	J	0.0065	MDL	21	MRL	mg/Kg	J	Z
COPPER	6.0	J	0.070	MDL	29	MRL	mg/Kg	J	Z
LEAD	6.7	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.35	J	0.017	MDL	5.2	MRL	mg/Kg	J	Z
NICKEL	8.8	J	0.025	MDL	29	MRL	mg/Kg	J	Z
SELENIUM	0.58	J	0.13	MDL	0.64	MRL	mg/Kg	J	Z
SILVER	0.028	J	0.020	MDL	0.78	MRL	mg/Kg	U	F
THALLIUM	0.26	J	0.0035	MDL	0.45	MRL	mg/Kg	J	Z
VANADIUM	29	J	0.038	MDL	61	MRL	mg/Kg	J	Z
ZINC	53	J	0.31	MDL	110	MRL	mg/Kg	J	Z

Sample ID: **SL-532-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 7:45:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.026	J	0.015	MDL	9.2	MRL	mg/Kg	J	Z, Q
ARSENIC	4.4	J	0.053	MDL	16	MRL	mg/Kg	J	Z
BARIUM	120	J	0.074	MDL	150	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-532-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 7:45:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.43	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.54	J	0.0099	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	19	J	0.080	MDL	39	MRL	mg/Kg	J	Z, Q
COBALT	6.6	J	0.0070	MDL	22	MRL	mg/Kg	J	Z
COPPER	15	J	0.075	MDL	31	MRL	mg/Kg	J	Z
LEAD	17	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.48	J	0.019	MDL	5.6	MRL	mg/Kg	J	Z
NICKEL	10	J	0.027	MDL	31	MRL	mg/Kg	J	Z
SELENIUM	0.61	J	0.14	MDL	0.69	MRL	mg/Kg	J	Z
SILVER	0.046	J	0.021	MDL	0.83	MRL	mg/Kg	U	F
THALLIUM	0.22	J	0.0037	MDL	0.48	MRL	mg/Kg	J	Z
VANADIUM	41	J	0.041	MDL	65	MRL	mg/Kg	J	Z
ZINC	89	J	0.33	MDL	120	MRL	mg/Kg	J	Z

Sample ID: SL-533-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 8:40:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.025	J	0.015	MDL	9.4	MRL	mg/Kg	J	Z, Q
ARSENIC	5.0	J	0.055	MDL	16	MRL	mg/Kg	J	Z
BARIUM	96	J	0.076	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.59	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.31	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	17	J	0.082	MDL	40	MRL	mg/Kg	J	Z, Q
COBALT	5.6	J	0.0072	MDL	23	MRL	mg/Kg	J	Z
COPPER	9.0	J	0.077	MDL	31	MRL	mg/Kg	J	Z
LEAD	12	J	0.020	MDL	37	MRL	mg/Kg	J	Z
MOLYBDENUM	0.45	J	0.019	MDL	5.7	MRL	mg/Kg	J	Z
NICKEL	12	J	0.027	MDL	31	MRL	mg/Kg	J	Z
SILVER	0.062	J	0.022	MDL	0.86	MRL	mg/Kg	U	F
THALLIUM	0.30	J	0.0038	MDL	0.50	MRL	mg/Kg	J	Z
VANADIUM	28	J	0.042	MDL	67	MRL	mg/Kg	J	Z
ZINC	65	J	0.34	MDL	120	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-534-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 9:05:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.022	J	0.015	MDL	9.3	MRL	mg/Kg	J	Z, Q
ARSENIC	3.3	J	0.054	MDL	16	MRL	mg/Kg	J	Z
BARIUM	100	J	0.075	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.68	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.44	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.081	MDL	39	MRL	mg/Kg	J	Z, Q
COBALT	5.1	J	0.0071	MDL	22	MRL	mg/Kg	J	Z
COPPER	8.3	J	0.076	MDL	31	MRL	mg/Kg	J	Z
LEAD	13	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.52	J	0.019	MDL	5.7	MRL	mg/Kg	J	Z
NICKEL	11	J	0.027	MDL	31	MRL	mg/Kg	J	Z
SILVER	0.082	J	0.022	MDL	0.84	MRL	mg/Kg	U	F
THALLIUM	0.30	J	0.0037	MDL	0.49	MRL	mg/Kg	J	Z
VANADIUM	28	J	0.041	MDL	66	MRL	mg/Kg	J	Z
ZINC	77	J	0.34	MDL	120	MRL	mg/Kg	J	Z

Sample ID: **SL-534-SA6-SB-3.0-4.0** ***Collected:*** **12/4/2012 9:15:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	9.0	MRL	mg/Kg	UJ	Q
ARSENIC	3.7	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	72	J	0.073	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.71	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0097	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	15	J	0.078	MDL	38	MRL	mg/Kg	J	Z, Q
COBALT	4.4	J	0.0068	MDL	22	MRL	mg/Kg	J	Z
COPPER	5.6	J	0.073	MDL	30	MRL	mg/Kg	J	Z
LEAD	6.1	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	0.51	J	0.018	MDL	5.5	MRL	mg/Kg	J	Z
NICKEL	9.6	J	0.026	MDL	30	MRL	mg/Kg	J	Z
SILVER	0.062	J	0.021	MDL	0.81	MRL	mg/Kg	U	F
THALLIUM	0.27	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z
VANADIUM	29	J	0.040	MDL	64	MRL	mg/Kg	J	Z
ZINC	54	J	0.33	MDL	110	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-536-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 1:30:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.016	J	0.014	MDL	8.9	MRL	mg/Kg	J	Z, Q
ARSENIC	8.4	J	0.052	MDL	15	MRL	mg/Kg	J	Z
BARIUM	100	J	0.072	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.71	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.12	J	0.0096	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	17	J	0.077	MDL	37	MRL	mg/Kg	J	Z, Q
COBALT	5.4	J	0.0068	MDL	21	MRL	mg/Kg	J	Z
COPPER	12	J	0.072	MDL	30	MRL	mg/Kg	J	Z
LEAD	9.3	J	0.019	MDL	35	MRL	mg/Kg	J	Z
MOLYBDENUM	1.1	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	8.3	J	0.026	MDL	30	MRL	mg/Kg	J	Z
SILVER	0.045	J	0.021	MDL	0.80	MRL	mg/Kg	U	F
VANADIUM	41	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	70	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-546-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 2:10:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.015	J	0.014	MDL	8.4	MRL	mg/Kg	J	Z, Q
ARSENIC	2.3	J	0.049	MDL	14	MRL	mg/Kg	J	Z
BARIUM	77	J	0.068	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.36	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.12	J	0.0091	MDL	0.97	MRL	mg/Kg	J	Z
CHROMIUM	13	J	0.073	MDL	36	MRL	mg/Kg	J	Z, Q
COBALT	4.5	J	0.0064	MDL	20	MRL	mg/Kg	J	Z
COPPER	5.9	J	0.069	MDL	28	MRL	mg/Kg	J	Z
LEAD	3.2	J	0.018	MDL	33	MRL	mg/Kg	J	Z
MOLYBDENUM	0.21	J	0.017	MDL	5.1	MRL	mg/Kg	J	Z
NICKEL	8.5	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SELENIUM	0.59	J	0.13	MDL	0.63	MRL	mg/Kg	J	Z
SILVER	0.020	J	0.020	MDL	0.76	MRL	mg/Kg	U	F
THALLIUM	0.22	J	0.0034	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	27	J	0.037	MDL	60	MRL	mg/Kg	J	Z
ZINC	53	J	0.31	MDL	110	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-546-SA6-SB-6.5-7.5 **Collected:** 12/4/2012 2:35:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.014	U	0.014	MDL	8.7	MRL	mg/Kg	UJ	Q
ARSENIC	4.7	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	34	J	0.071	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.49	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.069	J	0.0094	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	7.4	J	0.076	MDL	37	MRL	mg/Kg	J	Z, Q
COBALT	2.0	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	3.5	J	0.071	MDL	29	MRL	mg/Kg	J	Z
LEAD	5.7	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.42	J	0.018	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	3.2	J	0.025	MDL	29	MRL	mg/Kg	J	Z
VANADIUM	26	J	0.039	MDL	62	MRL	mg/Kg	J	Z
ZINC	54	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-549-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 12:55:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.016	J	0.015	MDL	9.1	MRL	mg/Kg	J	Z, Q
ARSENIC	3.1	J	0.053	MDL	16	MRL	mg/Kg	J	Z
BARIUM	76	J	0.074	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.40	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.13	J	0.0098	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	14	J	0.080	MDL	39	MRL	mg/Kg	J	Z, Q
COBALT	5.2	J	0.0069	MDL	22	MRL	mg/Kg	J	Z
COPPER	7.2	J	0.075	MDL	30	MRL	mg/Kg	J	Z
LEAD	3.8	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.22	J	0.018	MDL	5.6	MRL	mg/Kg	J	Z
NICKEL	8.3	J	0.027	MDL	30	MRL	mg/Kg	J	Z
SELENIUM	0.61	J	0.14	MDL	0.69	MRL	mg/Kg	J	Z
THALLIUM	0.27	J	0.0037	MDL	0.48	MRL	mg/Kg	J	Z
VANADIUM	29	J	0.040	MDL	65	MRL	mg/Kg	J	Z
ZINC	61	J	0.33	MDL	120	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-626-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 7:50:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.026	J	0.015	MDL	9.6	MRL	mg/Kg	J	Z, Q
ARSENIC	4.4	J	0.056	MDL	16	MRL	mg/Kg	J	Z
BARIUM	83	J	0.078	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.46	J	0.025	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.29	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	22	J	0.084	MDL	40	MRL	mg/Kg	J	Z, Q
COBALT	6.1	J	0.0073	MDL	23	MRL	mg/Kg	J	Z
COPPER	11	J	0.078	MDL	32	MRL	mg/Kg	J	Z
LEAD	9.9	J	0.020	MDL	37	MRL	mg/Kg	J	Z
MOLYBDENUM	0.30	J	0.019	MDL	5.8	MRL	mg/Kg	J	Z
NICKEL	15	J	0.028	MDL	32	MRL	mg/Kg	J	Z
SELENIUM	0.53	J	0.15	MDL	0.72	MRL	mg/Kg	J	Z
SILVER	0.17	J	0.022	MDL	0.87	MRL	mg/Kg	U	F
THALLIUM	0.23	J	0.0039	MDL	0.51	MRL	mg/Kg	J	Z
VANADIUM	37	J	0.042	MDL	68	MRL	mg/Kg	J	Z
ZINC	100	J	0.35	MDL	120	MRL	mg/Kg	J	Z

Sample ID: SL-627-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 8:30:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.021	J	0.014	MDL	8.8	MRL	mg/Kg	J	Z, Q
ARSENIC	3.2	J	0.051	MDL	15	MRL	mg/Kg	J	Z
BARIUM	68	J	0.071	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.38	J	0.023	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.26	J	0.0095	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	14	J	0.077	MDL	37	MRL	mg/Kg	J	Z, Q
COBALT	4.8	J	0.0067	MDL	21	MRL	mg/Kg	J	Z
COPPER	7.3	J	0.072	MDL	29	MRL	mg/Kg	J	Z
LEAD	12	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.28	J	0.018	MDL	5.4	MRL	mg/Kg	J	Z
NICKEL	9.5	J	0.026	MDL	29	MRL	mg/Kg	J	Z
SELENIUM	0.52	J	0.13	MDL	0.66	MRL	mg/Kg	J	Z
SILVER	0.13	J	0.021	MDL	0.80	MRL	mg/Kg	U	F
THALLIUM	0.19	J	0.0036	MDL	0.47	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-627-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 8:30:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	24	J	0.039	MDL	63	MRL	mg/Kg	J	Z
ZINC	63	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-627-SA6-SB-1.0-2.0 **Collected:** 12/4/2012 8:55:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.028	J	0.015	MDL	9.1	MRL	mg/Kg	J	Z, Q
ARSENIC	3.9	J	0.053	MDL	16	MRL	mg/Kg	J	Z
BARIUM	69	J	0.074	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.44	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.29	J	0.0098	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	17	J	0.079	MDL	38	MRL	mg/Kg	J	Z, Q
COBALT	5.0	J	0.0069	MDL	22	MRL	mg/Kg	J	Z
COPPER	11	J	0.074	MDL	30	MRL	mg/Kg	J	Z
LEAD	15	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.38	J	0.018	MDL	5.5	MRL	mg/Kg	J	Z
NICKEL	12	J	0.026	MDL	30	MRL	mg/Kg	J	Z
SELENIUM	0.54	J	0.14	MDL	0.69	MRL	mg/Kg	J	Z
SILVER	0.17	J	0.021	MDL	0.83	MRL	mg/Kg	U	F
THALLIUM	0.19	J	0.0037	MDL	0.48	MRL	mg/Kg	J	Z
VANADIUM	27	J	0.040	MDL	65	MRL	mg/Kg	J	Z
ZINC	73	J	0.33	MDL	120	MRL	mg/Kg	J	Z

Sample ID: SL-628-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 11:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.037	J	0.015	MDL	9.5	MRL	mg/Kg	J	Z, Q
ARSENIC	3.7	J	0.055	MDL	16	MRL	mg/Kg	J	Z
BARIUM	76	J	0.077	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.47	J	0.025	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.49	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	16	J	0.083	MDL	40	MRL	mg/Kg	J	Z, Q
COBALT	5.3	J	0.0072	MDL	23	MRL	mg/Kg	J	Z
COPPER	11	J	0.078	MDL	32	MRL	mg/Kg	J	Z
LEAD	26	J	0.020	MDL	37	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-628-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 11:00:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.39	J	0.019	MDL	5.8	MRL	mg/Kg	J	Z
NICKEL	13	J	0.028	MDL	32	MRL	mg/Kg	J	Z
SELENIUM	0.60	J	0.14	MDL	0.71	MRL	mg/Kg	J	Z
SILVER	0.43	J	0.022	MDL	0.86	MRL	mg/Kg	J	Z
THALLIUM	0.20	J	0.0038	MDL	0.50	MRL	mg/Kg	J	Z
VANADIUM	28	J	0.042	MDL	68	MRL	mg/Kg	J	Z
ZINC	90	J	0.34	MDL	120	MRL	mg/Kg	J	Z

Sample ID: SL-628-SA6-SB-4.0-5.0 **Collected:** 12/4/2012 11:20:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.020	J	0.014	MDL	8.7	MRL	mg/Kg	J	Z, Q
ARSENIC	5.2	J	0.050	MDL	15	MRL	mg/Kg	J	Z
BARIUM	82	J	0.070	MDL	140	MRL	mg/Kg	J	Z
BERYLLIUM	0.48	J	0.022	MDL	1.1	MRL	mg/Kg	J	Z
CADMIUM	0.15	J	0.0094	MDL	1.0	MRL	mg/Kg	J	Z
CHROMIUM	21	J	0.076	MDL	37	MRL	mg/Kg	J	Z, Q
COBALT	6.4	J	0.0066	MDL	21	MRL	mg/Kg	J	Z
COPPER	10	J	0.071	MDL	29	MRL	mg/Kg	J	Z
LEAD	5.7	J	0.018	MDL	34	MRL	mg/Kg	J	Z
MOLYBDENUM	0.27	J	0.018	MDL	5.3	MRL	mg/Kg	J	Z
NICKEL	15	J	0.025	MDL	29	MRL	mg/Kg	J	Z
SELENIUM	0.64	J	0.13	MDL	0.65	MRL	mg/Kg	J	Z
SILVER	0.11	J	0.020	MDL	0.79	MRL	mg/Kg	U	F
THALLIUM	0.22	J	0.0035	MDL	0.46	MRL	mg/Kg	J	Z
VANADIUM	38	J	0.038	MDL	62	MRL	mg/Kg	J	Z
ZINC	59	J	0.32	MDL	110	MRL	mg/Kg	J	Z

Sample ID: SL-629-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 1:30:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.039	J	0.015	MDL	9.6	MRL	mg/Kg	J	Z, Q
ARSENIC	4.6	J	0.056	MDL	16	MRL	mg/Kg	J	Z
BARIUM	94	J	0.078	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.52	J	0.025	MDL	1.2	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

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

Sample ID: **SL-629-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 1:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.67	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	21	J	0.084	MDL	40	MRL	mg/Kg	J	Z, Q
COBALT	6.2	J	0.0073	MDL	23	MRL	mg/Kg	J	Z
COPPER	14	J	0.078	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.56	J	0.019	MDL	5.8	MRL	mg/Kg	J	Z
NICKEL	15	J	0.028	MDL	32	MRL	mg/Kg	J	Z
SELENIUM	0.65	J	0.15	MDL	0.72	MRL	mg/Kg	J	Z
SILVER	0.59	J	0.022	MDL	0.87	MRL	mg/Kg	J	Z
THALLIUM	0.26	J	0.0039	MDL	0.51	MRL	mg/Kg	J	Z
VANADIUM	36	J	0.042	MDL	68	MRL	mg/Kg	J	Z

Sample ID: **SL-629-SA6-SB-2.5-3.5** ***Collected:*** **12/4/2012 2:05:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.019	J	0.013	MDL	8.3	MRL	mg/Kg	J	Z, Q
ARSENIC	6.4	J	0.048	MDL	14	MRL	mg/Kg	J	Z
BARIUM	89	J	0.067	MDL	130	MRL	mg/Kg	J	Z
BERYLLIUM	0.65	J	0.021	MDL	1.0	MRL	mg/Kg	J	Z
CADMIUM	0.24	J	0.0089	MDL	0.95	MRL	mg/Kg	J	Z
CHROMIUM	26	J	0.072	MDL	35	MRL	mg/Kg	J	Z, Q
COBALT	6.7	J	0.0063	MDL	20	MRL	mg/Kg	J	Z
COPPER	11	J	0.068	MDL	28	MRL	mg/Kg	J	Z
LEAD	8.1	J	0.017	MDL	32	MRL	mg/Kg	J	Z
MOLYBDENUM	0.38	J	0.017	MDL	5.0	MRL	mg/Kg	J	Z
NICKEL	17	J	0.024	MDL	28	MRL	mg/Kg	J	Z
SILVER	0.15	J	0.019	MDL	0.75	MRL	mg/Kg	U	F
THALLIUM	0.29	J	0.0033	MDL	0.44	MRL	mg/Kg	J	Z
VANADIUM	45	J	0.037	MDL	59	MRL	mg/Kg	J	Z
ZINC	65	J	0.30	MDL	100	MRL	mg/Kg	J	Z

Sample ID: **SL-630-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 2:25:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.041	J	0.016	MDL	10	MRL	mg/Kg	J	Z, Q
ARSENIC	6.3	J	0.059	MDL	17	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix:** SO

Sample ID: SL-630-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 2:25:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	110	J	0.082	MDL	160	MRL	mg/Kg	J	Z
BERYLLIUM	0.71	J	0.026	MDL	1.3	MRL	mg/Kg	J	Z
CADMIUM	0.34	J	0.011	MDL	1.2	MRL	mg/Kg	J	Z
CHROMIUM	26	J	0.088	MDL	43	MRL	mg/Kg	J	Z, Q
COBALT	7.9	J	0.0077	MDL	24	MRL	mg/Kg	J	Z
COPPER	13	J	0.083	MDL	34	MRL	mg/Kg	J	Z
LEAD	17	J	0.021	MDL	40	MRL	mg/Kg	J	Z
MOLYBDENUM	0.57	J	0.020	MDL	6.2	MRL	mg/Kg	J	Z
NICKEL	17	J	0.029	MDL	34	MRL	mg/Kg	J	Z
SELENIUM	0.74	J	0.15	MDL	0.76	MRL	mg/Kg	J	Z
SILVER	0.12	J	0.024	MDL	0.92	MRL	mg/Kg	U	F
THALLIUM	0.31	J	0.0041	MDL	0.53	MRL	mg/Kg	J	Z
VANADIUM	47	J	0.045	MDL	72	MRL	mg/Kg	J	Z
ZINC	81	J	0.37	MDL	130	MRL	mg/Kg	J	Z

Sample ID: SL-631-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 10:20:00 **Analysis Type:** RES/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.033	J	0.015	MDL	9.3	MRL	mg/Kg	J	Z, Q
ARSENIC	4.6	J	0.054	MDL	16	MRL	mg/Kg	J	Z
BARIUM	88	J	0.075	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.50	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.30	J	0.010	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	19	J	0.081	MDL	39	MRL	mg/Kg	J	Z, Q
COBALT	5.9	J	0.0071	MDL	22	MRL	mg/Kg	J	Z
COPPER	9.8	J	0.076	MDL	31	MRL	mg/Kg	J	Z
LEAD	14	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.39	J	0.019	MDL	5.7	MRL	mg/Kg	J	Z
NICKEL	14	J	0.027	MDL	31	MRL	mg/Kg	J	Z
SELENIUM	0.67	J	0.14	MDL	0.70	MRL	mg/Kg	J	Z
SILVER	0.11	J	0.022	MDL	0.85	MRL	mg/Kg	U	F
THALLIUM	0.25	J	0.0038	MDL	0.49	MRL	mg/Kg	J	Z
VANADIUM	34	J	0.041	MDL	66	MRL	mg/Kg	J	Z
ZINC	72	J	0.34	MDL	120	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 6020A **Matrix: SO**

Sample ID: SL-632-SA6-SB-0.0-0.5 **Collected: 12/4/2012 9:55:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.026	J	0.015	MDL	9.2	MRL	mg/Kg	J	Z, Q
ARSENIC	4.8	J	0.053	MDL	16	MRL	mg/Kg	J	Z
BARIUM	69	J	0.074	MDL	150	MRL	mg/Kg	J	Z
BERYLLIUM	0.46	J	0.024	MDL	1.2	MRL	mg/Kg	J	Z
CADMIUM	0.21	J	0.0099	MDL	1.1	MRL	mg/Kg	J	Z
CHROMIUM	19	J	0.080	MDL	39	MRL	mg/Kg	J	Z, Q
COBALT	5.7	J	0.0070	MDL	22	MRL	mg/Kg	J	Z
COPPER	9.1	J	0.075	MDL	31	MRL	mg/Kg	J	Z
LEAD	12	J	0.019	MDL	36	MRL	mg/Kg	J	Z
MOLYBDENUM	0.34	J	0.019	MDL	5.6	MRL	mg/Kg	J	Z
NICKEL	13	J	0.027	MDL	31	MRL	mg/Kg	J	Z
SELENIUM	0.61	J	0.14	MDL	0.69	MRL	mg/Kg	J	Z
SILVER	0.084	J	0.021	MDL	0.83	MRL	mg/Kg	U	F
THALLIUM	0.25	J	0.0037	MDL	0.48	MRL	mg/Kg	J	Z
VANADIUM	36	J	0.041	MDL	65	MRL	mg/Kg	J	Z
ZINC	61	J	0.33	MDL	120	MRL	mg/Kg	J	Z

Method Category: METALS

Method: 7471B **Matrix: SO**

Sample ID: SL-531-SA6-SB-0.0-0.5 **Collected: 12/4/2012 8:10:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.014	J	0.0071	MDL	0.026	MRL	mg/Kg	J	Z

Sample ID: SL-534-SA6-SB-3.0-4.0 **Collected: 12/4/2012 9:15:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.014	J	0.0063	MDL	0.023	MRL	mg/Kg	J	Z

Sample ID: SL-536-SA6-SB-0.0-0.5 **Collected: 12/4/2012 1:30:00** **Analysis Type: RES/TOT** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0091	J	0.0072	MDL	0.026	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **METALS**

Method: **7471B** ***Matrix:*** **SO**

Sample ID: **SL-626-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 7:50:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.014	J	0.0065	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: **SL-627-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 8:30:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.013	J	0.0067	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: **SL-627-SA6-SB-1.0-2.0** ***Collected:*** **12/4/2012 8:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.014	J	0.0073	MDL	0.026	MRL	mg/Kg	J	Z

Sample ID: **SL-628-SA6-SB-4.0-5.0** ***Collected:*** **12/4/2012 11:20:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.012	J	0.0066	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: **SL-629-SA6-SB-2.5-3.5** ***Collected:*** **12/4/2012 2:05:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.011	J	0.0066	MDL	0.024	MRL	mg/Kg	J	Z

Sample ID: **SL-630-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 2:25:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.024	J	0.0077	MDL	0.028	MRL	mg/Kg	J	Z

Sample ID: **SL-631-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 10:20:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.025	J	0.0078	MDL	0.028	MRL	mg/Kg	J	Z

Sample ID: **SL-632-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 9:55:00** ***Analysis Type:*** **RES/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.024	J	0.0074	MDL	0.027	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: METALS

Method: 7471B **Matrix:** SO

Method Category: SVOA

Method: 8015B EFH **Matrix:** SO

Sample ID: SL-529-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 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
EFH(C21-C30)	3.2	J	1.1	MDL	5.6	MRL	mg/Kg	J	Z

Sample ID: SL-531-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 8:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	1.5	J	1.2	MDL	5.8	MRL	mg/Kg	J	Z
EFH(C30-C40)	5.9	J	1.2	MDL	12	MRL	mg/Kg	J	Z

Sample ID: SL-533-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 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
EFH(C21-C30)	2.3	J	1.1	MDL	5.7	MRL	mg/Kg	J	Z

Sample ID: SL-534-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 9:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C21-C30)	3.0	J	1.2	MDL	5.8	MRL	mg/Kg	J	Z
EFH(C30-C40)	11	J	1.2	MDL	12	MRL	mg/Kg	J	Z

Sample ID: SL-534-SA6-SB-3.0-4.0 **Collected:** 12/4/2012 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C30-C40)	2.9	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: SL-546-SA6-SB-6.5-7.5 **Collected:** 12/4/2012 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
TOTAL EFH(C8-C40)	0.90	J	0.71	MDL	4.2	MRL	mg/Kg	J	Z

Sample ID: SL-626-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 7:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	2.1	J	1.1	MDL	5.4	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

Method: **8015B EFH** ***Matrix:*** **SO**

Sample ID: **SL-627-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 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
EFH(C15-C20)	1.9	J	1.1	MDL	5.7	MRL	mg/Kg	J	Z

Sample ID: **SL-627-SA6-SB-1.0-2.0** ***Collected:*** **12/4/2012 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
EFH(C15-C20)	1.5	J	1.1	MDL	5.6	MRL	mg/Kg	J	Z

Sample ID: **SL-628-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	1.9	J	1.1	MDL	5.7	MRL	mg/Kg	J	Z

Sample ID: **SL-628-SA6-SB-4.0-5.0** ***Collected:*** **12/4/2012 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
EFH(C21-C30)	1.2	J	1.0	MDL	5.1	MRL	mg/Kg	J	Z
EFH(C30-C40)	7.0	J	1.0	MDL	10	MRL	mg/Kg	J	Z

Sample ID: **SL-629-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	3.9	J	1.2	MDL	6.1	MRL	mg/Kg	J	Z
EFH(C8-C11)	1.3	J	1.2	MDL	6.1	MRL	mg/Kg	J	Z

Sample ID: **SL-629-SA6-SB-2.5-3.5** ***Collected:*** **12/4/2012 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
EFH(C21-C30)	3.7	J	1.0	MDL	5.1	MRL	mg/Kg	J	Z

Sample ID: **SL-630-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 2:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	5.2	J	1.3	MDL	6.3	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8015B EFH **Matrix:** SO

Sample ID: SL-631-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 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
EFH(C15-C20)	1.9	J	1.2	MDL	6.1	MRL	mg/Kg	J	Z

Sample ID: SL-632-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 9:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH(C15-C20)	4.0	J	1.1	MDL	5.7	MRL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081B **Matrix:** SO

Sample ID: SL-626-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 7:50:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.2	J p	0.27	MDL	3.7	MRL	ug/Kg	J	Z, *XIII
TOXAPHENE	18	U	18	MDL	56	MRL	ug/Kg	UJ	C

Sample ID: SL-628-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 11:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	2.7	J p	0.27	MDL	3.8	MRL	ug/Kg	J	Z, *XIII
4,4'-DDT	12	p	0.68	MDL	3.8	MRL	ug/Kg	J	*XIII
TOXAPHENE	18	U	18	MDL	57	MRL	ug/Kg	UJ	C

Sample ID: SL-628-SA6-SB-4.0-5.0 **Collected:** 12/4/2012 11:20:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.85	J p	0.58	MDL	3.3	MRL	ug/Kg	J	Z, *XIII
TOXAPHENE	16	U	16	MDL	49	MRL	ug/Kg	UJ	C

Sample ID: SL-630-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 2:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.2	J	0.29	MDL	4.0	MRL	ug/Kg	J	Z
4,4'-DDT	2.9	J	0.71	MDL	4.0	MRL	ug/Kg	J	Z
TOXAPHENE	19	U	19	MDL	60	MRL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8081B **Matrix:** SO

Sample ID: SL-632-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 9:55:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	2.8	J	0.28	MDL	3.9	MRL	ug/Kg	J	Z
TOXAPHENE	19	U	19	MDL	59	MRL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8082A **Matrix:** SO

Sample ID: SL-529-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 9:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	18	U	18	MDL	58	MRL	ug/Kg	UJ	C
Aroclor 5442	37	U	37	MDL	58	MRL	ug/Kg	UJ	C
Aroclor 5460	19	U	19	MDL	58	MRL	ug/Kg	UJ	C

Sample ID: SL-532-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 7:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	18	U	18	MDL	58	MRL	ug/Kg	UJ	C
Aroclor 5442	37	U	37	MDL	58	MRL	ug/Kg	UJ	C
Aroclor 5460	19	U	19	MDL	58	MRL	ug/Kg	UJ	C

Sample ID: SL-533-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 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
Aroclor 5432	18	U	18	MDL	57	MRL	ug/Kg	UJ	C
Aroclor 5442	37	U	37	MDL	57	MRL	ug/Kg	UJ	C
Aroclor 5460	19	U	19	MDL	57	MRL	ug/Kg	UJ	C

Sample ID: SL-534-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 9:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	18	U	18	MDL	57	MRL	ug/Kg	UJ	C
Aroclor 5442	37	U	37	MDL	57	MRL	ug/Kg	UJ	C
Aroclor 5460	19	U	19	MDL	57	MRL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

Method: 8082A **Matrix: SO**

Sample ID: SL-534-SA6-SB-3.0-4.0 **Collected: 12/4/2012 9:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	16	U	16	MDL	51	MRL	ug/Kg	UJ	C
Aroclor 5442	33	U	33	MDL	51	MRL	ug/Kg	UJ	C
Aroclor 5460	17	U	17	MDL	51	MRL	ug/Kg	UJ	C

Sample ID: SL-626-SA6-SB-0.0-0.5 **Collected: 12/4/2012 7:50:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	18	U	18	MDL	56	MRL	ug/Kg	UJ	C
Aroclor 5442	36	U	36	MDL	56	MRL	ug/Kg	UJ	C
Aroclor 5460	18	U	18	MDL	56	MRL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-630-SA6-SB-0.0-0.5 **Collected: 12/4/2012 2:25:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	10	J p	9.0	MDL	96	MRL	ug/Kg	J	Z
MCPA	2600	J	2400	MDL	7800	MRL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-529-SA6-SB-0.0-0.5 **Collected: 12/4/2012 9:45:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.35	J	0.29	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.79	J B	0.35	MDL	11	MRL	ug/Kg	U	B
ACENAPHTHENE	0.30	J	0.18	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	0.91	J	0.83	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	1.3	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	1.2	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	1.7	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	1.1	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-529-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 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
INDENO(1,2,3-CD)PYRENE	1.2	J	1.2	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	0.43	J	0.37	MDL	11	MRL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	1.2	MDL	11	MRL	ug/Kg	J	Z
PYRENE	1.5	J	1.2	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-531-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 8:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.35	J	0.19	MDL	12	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.0	J	1.0	MDL	12	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.86	MDL	12	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.9	J	1.4	MDL	12	MRL	ug/Kg	J	Z
CHRYSENE	1.7	J	1.2	MDL	12	MRL	ug/Kg	J	Z
FLUORANTHENE	2.6	J	1.2	MDL	12	MRL	ug/Kg	J	Z
NAPHTHALENE	0.40	J	0.38	MDL	12	MRL	ug/Kg	J	Z
PHENANTHRENE	2.0	J	1.3	MDL	12	MRL	ug/Kg	J	Z
PYRENE	2.3	J	1.3	MDL	12	MRL	ug/Kg	J	Z

Sample ID: SL-532-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 7:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.42	J	0.30	MDL	12	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.76	J B	0.36	MDL	12	MRL	ug/Kg	U	B
ACENAPHTHENE	0.62	J	0.18	MDL	12	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	1.6	J	0.20	MDL	12	MRL	ug/Kg	J	Z
ANTHRACENE	5.4	J	0.83	MDL	12	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	11	J	0.85	MDL	12	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	6.3	J	1.3	MDL	12	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	6.0	J	1.2	MDL	12	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.5	J	1.5	MDL	12	MRL	ug/Kg	J	Z
FLUORENE	0.59	J	0.54	MDL	12	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	7.2	J	1.3	MDL	12	MRL	ug/Kg	J	Z
NAPHTHALENE	0.86	J	0.38	MDL	12	MRL	ug/Kg	J	Z
PHENANTHRENE	5.1	J	1.3	MDL	12	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-533-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 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
ACENAPHTHENE	0.22	J	0.18	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.34	J	0.19	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	1.4	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	1.4	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	1.8	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	0.98	J	0.53	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	0.53	J	0.37	MDL	11	MRL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	1.2	MDL	11	MRL	ug/Kg	J	Z
PYRENE	1.4	J	1.2	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-534-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 9:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.40	J	0.30	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.49	J B	0.35	MDL	11	MRL	ug/Kg	U	B
ACENAPHTHENE	0.40	J	0.18	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	1.4	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	1.5	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	0.59	J	0.54	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	0.65	J	0.37	MDL	11	MRL	ug/Kg	J	Z
PYRENE	1.3	J	1.3	MDL	11	MRL	ug/Kg	J	Z

Sample ID: SL-536-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 1:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.95	J	0.27	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.84	J B	0.32	MDL	11	MRL	ug/Kg	U	B
ANTHRACENE	1.5	J	0.76	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	3.3	J	0.49	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	0.83	J	0.34	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

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

Sample ID: **SL-546-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 2:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORENE	0.59	J	0.49	MDL	10	MRL	ug/Kg	J	Z

Sample ID: **SL-546-SA6-SB-6.5-7.5** ***Collected:*** **12/4/2012 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
FLUORENE	0.54	J	0.50	MDL	11	MRL	ug/Kg	J	Z

Sample ID: **SL-549-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.28	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.1	J B	0.33	MDL	11	MRL	ug/Kg	U	B
ACENAPHTHENE	0.46	J	0.17	MDL	11	MRL	ug/Kg	J	Z
ANTHRACENE	1.3	J	0.77	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	9.7	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	1.3	J	0.50	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	0.78	J	0.35	MDL	11	MRL	ug/Kg	J	Z

Sample ID: **SL-626-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 7:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.77	J	0.28	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.1	J B	0.34	MDL	11	MRL	ug/Kg	U	B
ACENAPHTHENE	0.95	J	0.17	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	0.78	J	0.18	MDL	11	MRL	ug/Kg	J	Z
ANTHRACENE	0.78	J	0.78	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.80	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.3	J	1.3	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	2.1	J	1.2	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	3.7	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	4.5	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	2.6	J	0.51	MDL	11	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	1.2	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	2.8	J	0.35	MDL	11	MRL	ug/Kg	J	Z
PHENANTHRENE	3.7	J	1.2	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

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

Sample ID: **SL-626-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 7:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	3.6	J	1.2	MDL	11	MRL	ug/Kg	J	Z

Sample ID: **SL-627-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 8:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.30	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.7	J B	0.35	MDL	11	MRL	ug/Kg	U	B
ACENAPHTHENE	1.0	J	0.18	MDL	11	MRL	ug/Kg	J	Z
ACENAPHTHYLENE	1.4	J	0.19	MDL	11	MRL	ug/Kg	J	Z
ANTHRACENE	1.6	J	0.82	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	2.0	J	1.0	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	2.1	J	0.85	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.4	J	1.4	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.2	J	1.3	MDL	11	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	1.1	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	7.3	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	9.2	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORENE	6.8	J	0.54	MDL	11	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	3.2	J	1.3	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	5.0	J	0.37	MDL	11	MRL	ug/Kg	J	Z
PHENANTHRENE	9.2	J	1.3	MDL	11	MRL	ug/Kg	J	Z
PYRENE	7.5	J	1.3	MDL	11	MRL	ug/Kg	J	Z

Sample ID: **SL-627-SA6-SB-1.0-2.0** ***Collected:*** **12/4/2012 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	0.36	J	0.28	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.66	J B	0.33	MDL	11	MRL	ug/Kg	U	B
BENZO(A)ANTHRACENE	1.1	J	0.96	MDL	11	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.79	MDL	11	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	5.0	J	1.3	MDL	11	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	3.6	J	1.2	MDL	11	MRL	ug/Kg	J	Z
CHRYSENE	3.5	J	1.1	MDL	11	MRL	ug/Kg	J	Z
FLUORANTHENE	3.1	J	1.1	MDL	11	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.9	J	1.2	MDL	11	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: **SVOA**

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

Sample ID: **SL-627-SA6-SB-1.0-2.0** ***Collected:*** **12/4/2012 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
NAPHTHALENE	1.0	J	0.35	MDL	11	MRL	ug/Kg	J	Z
PHENANTHRENE	2.4	J	1.2	MDL	11	MRL	ug/Kg	J	Z
PYRENE	2.9	J	1.2	MDL	11	MRL	ug/Kg	J	Z

Sample ID: **SL-628-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.30	MDL	11	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.8	J B	0.35	MDL	11	MRL	ug/Kg	U	B
ANTHRACENE	4.5	J	0.82	MDL	11	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	8.4	J	1.5	MDL	11	MRL	ug/Kg	J	Z
NAPHTHALENE	3.9	J	0.37	MDL	11	MRL	ug/Kg	J	Z

Sample ID: **SL-629-SA6-SB-0.0-0.5** ***Collected:*** **12/4/2012 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	3.0	J	0.31	MDL	12	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	4.8	J B	0.37	MDL	12	MRL	ug/Kg	J	Z
ANTHRACENE	7.1	J	0.86	MDL	12	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	7.4	J	1.1	MDL	12	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	9.1	J	0.88	MDL	12	MRL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.4	J	1.2	MDL	12	MRL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	2.3	J	1.6	MDL	12	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	10	J	1.3	MDL	12	MRL	ug/Kg	J	Z

Sample ID: **SL-629-SA6-SB-2.5-3.5** ***Collected:*** **12/4/2012 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(B)FLUORANTHENE	2.0	J	1.2	MDL	10	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	1.1	MDL	10	MRL	ug/Kg	J	Z
CHRYSENE	1.7	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	1.0	MDL	10	MRL	ug/Kg	J	Z
FLUORENE	0.91	J	0.48	MDL	10	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	1.1	MDL	10	MRL	ug/Kg	J	Z
NAPHTHALENE	0.38	J	0.33	MDL	10	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-629-SA6-SB-2.5-3.5 **Collected:** 12/4/2012 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
PHENANTHRENE	1.2	J	1.1	MDL	10	MRL	ug/Kg	J	Z
PYRENE	1.6	J	1.1	MDL	10	MRL	ug/Kg	J	Z

Sample ID: SL-630-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 2:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.5	J	0.31	MDL	12	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	2.4	J B	0.37	MDL	12	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	2.0	J	1.1	MDL	12	MRL	ug/Kg	J	Z
BENZO(A)PYRENE	2.2	J	0.88	MDL	12	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	4.7	J	1.4	MDL	12	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	2.9	J	1.3	MDL	12	MRL	ug/Kg	J	Z
CHRYSENE	5.6	J	1.2	MDL	12	MRL	ug/Kg	J	Z
FLUORANTHENE	5.5	J	1.2	MDL	12	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.5	J	1.3	MDL	12	MRL	ug/Kg	J	Z
NAPHTHALENE	5.6	J	0.39	MDL	12	MRL	ug/Kg	J	Z
PHENANTHRENE	7.8	J	1.3	MDL	12	MRL	ug/Kg	J	Z
PYRENE	5.4	J	1.3	MDL	12	MRL	ug/Kg	J	Z

Sample ID: SL-631-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 10:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	3.4	J	0.31	MDL	12	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	4.4	J B	0.37	MDL	12	MRL	ug/Kg	J	Z
ANTHRACENE	2.9	J	0.86	MDL	12	MRL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	2.0	J	1.1	MDL	12	MRL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	5.1	J	1.4	MDL	12	MRL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	2.4	J	1.3	MDL	12	MRL	ug/Kg	J	Z
CHRYSENE	6.8	J	1.2	MDL	12	MRL	ug/Kg	J	Z
FLUORANTHENE	8.6	J	1.2	MDL	12	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.4	J	1.3	MDL	12	MRL	ug/Kg	J	Z
PYRENE	7.4	J	1.3	MDL	12	MRL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method Category: SVOA

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

Sample ID: SL-632-SA6-SB-0.0-0.5 **Collected:** 12/4/2012 9:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.6	J	0.31	MDL	12	MRL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	2.4	J B	0.36	MDL	12	MRL	ug/Kg	J	Z
ACENAPHTHENE	6.6	J	0.19	MDL	12	MRL	ug/Kg	J	Z
CHRYSENE	3.3	J	1.2	MDL	12	MRL	ug/Kg	J	Z
FLUORANTHENE	3.8	J	1.2	MDL	12	MRL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	2.1	J	1.3	MDL	12	MRL	ug/Kg	J	Z
NAPHTHALENE	5.6	J	0.38	MDL	12	MRL	ug/Kg	J	Z
PHENANTHRENE	7.5	J	1.3	MDL	12	MRL	ug/Kg	J	Z
PYRENE	3.3	J	1.3	MDL	12	MRL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B GRO **Matrix:** SO

Sample ID: SL-534-SA6-SB-3.5 **Collected:** 12/4/2012 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
GASOLINE RANGE ORGANICS (C4-C12)	0.33	J	0.33	MDL	1.0	MRL	mg/Kg	J	Z

Sample ID: SL-627-SA6-SB-1.5 **Collected:** 12/4/2012 9:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C4-C12)	0.47	J	0.42	MDL	1.3	MRL	mg/Kg	J	Z

Sample ID: SL-629-SA6-SB-3.0 **Collected:** 12/4/2012 2:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C4-C12)	0.39	J	0.35	MDL	1.1	MRL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Data Qualifier Summary

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Reason Code Legend

Reason Code	*Description*
*XIII	RPD Between Two Columns
A	ICP Serial Dilution
B	Method Blank Contamination
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Estimation
F	Field Blank Contamination
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

280-36589-1

Method Blank Outlier Report

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MB 280-151130/1-A	12/12/2012 4:57:00 PM	2-METHYLNAPHTHALENE	0.410 ug/Kg	SL-529-SA6-SB-0.0-0.5 SL-531-SA6-SB-0.0-0.5 SL-532-SA6-SB-0.0-0.5 SL-533-SA6-SB-0.0-0.5 SL-534-SA6-SB-0.0-0.5 SL-534-SA6-SB-3.0-4.0 SL-536-SA6-SB-0.0-0.5 SL-546-SA6-SB-0.0-0.5 SL-546-SA6-SB-6.5-7.5 SL-549-SA6-SB-0.0-0.5 SL-626-SA6-SB-0.0-0.5 SL-627-SA6-SB-0.0-0.5 SL-627-SA6-SB-1.0-2.0 SL-628-SA6-SB-0.0-0.5 SL-628-SA6-SB-4.0-5.0 SL-629-SA6-SB-0.0-0.5 SL-629-SA6-SB-2.5-3.5 SL-630-SA6-SB-0.0-0.5 SL-631-SA6-SB-0.0-0.5 SL-632-SA6-SB-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-529-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	0.79 ug/Kg	11U ug/Kg
SL-532-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	0.76 ug/Kg	12U ug/Kg
SL-534-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	0.49 ug/Kg	11U ug/Kg
SL-536-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	0.84 ug/Kg	11U ug/Kg
SL-549-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	1.1 ug/Kg	11U ug/Kg
SL-626-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	1.1 ug/Kg	11U ug/Kg
SL-627-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	1.7 ug/Kg	11U ug/Kg
SL-627-SA6-SB-1.0-2.0(RES)	2-METHYLNAPHTHALENE	0.66 ug/Kg	11U ug/Kg
SL-628-SA6-SB-0.0-0.5(RES)	2-METHYLNAPHTHALENE	1.8 ug/Kg	11U ug/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	BORON SODIUM	0.024 mg/L 0.17 mg/L	SL-529-SA6-SB-0.0-0.5 SL-531-SA6-SB-0.0-0.5 SL-532-SA6-SB-0.0-0.5 SL-533-SA6-SB-0.0-0.5 SL-534-SA6-SB-0.0-0.5 SL-534-SA6-SB-3.0-4.0 SL-534-SA6-SB-3.5 SL-536-SA6-SB-0.0-0.5 SL-546-SA6-SB-0.0-0.5 SL-546-SA6-SB-6.5-7.5 SL-546-SA6-SB-7.0 SL-549-SA6-SB-0.0-0.5 SL-626-SA6-SB-0.0-0.5 SL-627-SA6-SB-0.0-0.5 SL-627-SA6-SB-1.0-2.0 SL-627-SA6-SB-1.5 SL-628-SA6-SB-0.0-0.5 SL-628-SA6-SB-4.0-5.0 SL-628-SA6-SB-4.5 SL-629-SA6-SB-0.0-0.5 SL-629-SA6-SB-2.5-3.5 SL-629-SA6-SB-3.0 SL-630-SA6-SB-0.0-0.5 SL-631-SA6-SB-0.0-0.5 SL-632-SA6-SB-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-529-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.5 mg/Kg	1.5U mg/Kg
SL-531-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	79 mg/Kg	79U mg/Kg
SL-532-SA6-SB-0.0-0.5(RES/TOT)	BORON	2.1 mg/Kg	2.1U mg/Kg
SL-533-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.6 mg/Kg	1.6U mg/Kg
SL-533-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	76 mg/Kg	76U mg/Kg
SL-534-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.8 mg/Kg	1.8U mg/Kg
SL-534-SA6-SB-3.0-4.0(RES/TOT)	BORON	1.1 mg/Kg	1.1U mg/Kg
SL-626-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.3 mg/Kg	1.3U mg/Kg
SL-626-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	91 mg/Kg	91U mg/Kg
SL-627-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.3 mg/Kg	1.3U mg/Kg
SL-627-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	82 mg/Kg	82U mg/Kg
SL-627-SA6-SB-1.0-2.0(RES/TOT)	BORON	0.96 mg/Kg	0.96U mg/Kg
SL-627-SA6-SB-1.0-2.0(RES/TOT)	SODIUM	80 mg/Kg	80U mg/Kg
SL-628-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.7 mg/Kg	1.7U mg/Kg
SL-628-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	86 mg/Kg	86U mg/Kg
SL-628-SA6-SB-4.0-5.0(RES/TOT)	BORON	1.3 mg/Kg	1.3U mg/Kg
SL-629-SA6-SB-0.0-0.5(RES/TOT)	BORON	3.8 mg/Kg	3.8U mg/Kg
SL-629-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	120 mg/Kg	120U mg/Kg
SL-629-SA6-SB-2.5-3.5(RES/TOT)	BORON	1.4 mg/Kg	1.4U mg/Kg
SL-629-SA6-SB-2.5-3.5(RES/TOT)	SODIUM	130 mg/Kg	130U mg/Kg
SL-630-SA6-SB-0.0-0.5(RES/TOT)	BORON	3.6 mg/Kg	3.6U mg/Kg
SL-630-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	75 mg/Kg	75U mg/Kg
SL-631-SA6-SB-0.0-0.5(RES/TOT)	BORON	3.7 mg/Kg	3.7U mg/Kg
SL-631-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	87 mg/Kg	87U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **6010C**
Matrix: **SO**

Field Blank Sample ID	Collected 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-632-SA6-SB-0.0-0.5(RES/TOT)	BORON	1.6 mg/Kg	1.6U mg/Kg
SL-632-SA6-SB-0.0-0.5(RES/TOT)	SODIUM	62 mg/Kg	62U mg/Kg

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

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-111412(RES/TOT)	11/14/2012 3:00:00 PM	SILVER	0.00078 mg/L	SL-529-SA6-SB-0.0-0.5 SL-531-SA6-SB-0.0-0.5 SL-532-SA6-SB-0.0-0.5 SL-533-SA6-SB-0.0-0.5 SL-534-SA6-SB-0.0-0.5 SL-534-SA6-SB-3.0-4.0 SL-534-SA6-SB-3.5 SL-536-SA6-SB-0.0-0.5 SL-546-SA6-SB-0.0-0.5 SL-546-SA6-SB-6.5-7.5 SL-546-SA6-SB-7.0 SL-549-SA6-SB-0.0-0.5 SL-626-SA6-SB-0.0-0.5 SL-627-SA6-SB-0.0-0.5 SL-627-SA6-SB-1.0-2.0 SL-627-SA6-SB-1.5 SL-628-SA6-SB-0.0-0.5 SL-628-SA6-SB-4.0-5.0 SL-628-SA6-SB-4.5 SL-629-SA6-SB-0.0-0.5 SL-629-SA6-SB-2.5-3.5 SL-629-SA6-SB-3.0 SL-630-SA6-SB-0.0-0.5 SL-631-SA6-SB-0.0-0.5 SL-632-SA6-SB-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-529-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.050 mg/Kg	0.050U mg/Kg
SL-531-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.028 mg/Kg	0.028U mg/Kg
SL-532-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.046 mg/Kg	0.046U mg/Kg
SL-533-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.062 mg/Kg	0.062U mg/Kg
SL-534-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.082 mg/Kg	0.082U mg/Kg
SL-534-SA6-SB-3.0-4.0(RES/TOT)	SILVER	0.062 mg/Kg	0.062U mg/Kg
SL-536-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.045 mg/Kg	0.045U mg/Kg
SL-546-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.020 mg/Kg	0.020U mg/Kg
SL-626-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.17 mg/Kg	0.17U mg/Kg
SL-627-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.13 mg/Kg	0.13U mg/Kg
SL-627-SA6-SB-1.0-2.0(RES/TOT)	SILVER	0.17 mg/Kg	0.17U mg/Kg
SL-628-SA6-SB-4.0-5.0(RES/TOT)	SILVER	0.11 mg/Kg	0.11U mg/Kg
SL-629-SA6-SB-2.5-3.5(RES/TOT)	SILVER	0.15 mg/Kg	0.15U mg/Kg

Field Blank Outlier Report

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

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

Field Blank Sample ID	Collected 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-630-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.12 mg/Kg	0.12U mg/Kg
SL-631-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.11 mg/Kg	0.11U mg/Kg
SL-632-SA6-SB-0.0-0.5(RES/TOT)	SILVER	0.084 mg/Kg	0.084U mg/Kg

Surrogate Outlier Report

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8082A
Matrix: SO

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-631-SA6-SB-0.0 -0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)
SL-632-SA6-SB-0.0 -0.5	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: SO

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-536-SA6-SB-0.0 -0.5	Nitrobenzene-d5	134	40.00-130.00	No Affected Compounds	
SL-549-SA6-SB-0.0 -0.5	Nitrobenzene-d5	140	40.00-130.00	No Affected Compounds	
SL-626-SA6-SB-0.0 -0.5	Nitrobenzene-d5	137	40.00-130.00	No Affected Compounds	
SL-627-SA6-SB-0.0 -0.5	Nitrobenzene-d5	154	40.00-130.00	No Affected Compounds	
SL-628-SA6-SB-0.0 -0.5	Nitrobenzene-d5	166	40.00-130.00	No Affected Compounds	
SL-629-SA6-SB-0.0 -0.5	Nitrobenzene-d5	318	40.00-130.00	No Affected Compounds	
SL-630-SA6-SB-0.0 -0.5	Nitrobenzene-d5	244	40.00-130.00	No Affected Compounds	
SL-631-SA6-SB-0.0 -0.5	Nitrobenzene-d5	174	40.00-130.00	No Affected Compounds	
SL-632-SA6-SB-0.0 -0.5	Nitrobenzene-d5	328	40.00-130.00	No Affected Compounds	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-549-SA6-SB-0.0-0.5MS (TOT) **SL-549-SA6-SB-0.0-0.5MSD (TOT)** (SL-529-SA6-SB-0.0-0.5 SL -531-SA6-SB-0.0-0.5 SL -532-SA6-SB-0.0-0.5 SL -533-SA6-SB-0.0-0.5 SL -534-SA6-SB-0.0-0.5 SL -534-SA6-SB-3.0-4.0 SL -536-SA6-SB-0.0-0.5 SL -546-SA6-SB-0.0-0.5 SL -546-SA6-SB-6.5-7.5 SL -549-SA6-SB-0.0-0.5 SL -626-SA6-SB-0.0-0.5 SL -627-SA6-SB-0.0-0.5 SL -627-SA6-SB-1.0-2.0 SL -628-SA6-SB-0.0-0.5 SL -628-SA6-SB-4.0-5.0 SL -629-SA6-SB-0.0-0.5 SL -629-SA6-SB-2.5-3.5 SL -630-SA6-SB-0.0-0.5 SL -631-SA6-SB-0.0-0.5 SL -632-SA6-SB-0.0-0.5)	ALUMINUM TITANIUM	753 183	597 134	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	No Qual, >4x
SL-549-SA6-SB-0.0-0.5MS (TOT) **SL-549-SA6-SB-0.0-0.5MSD (TOT)** (SL-529-SA6-SB-0.0-0.5 SL -531-SA6-SB-0.0-0.5 SL -532-SA6-SB-0.0-0.5 SL -533-SA6-SB-0.0-0.5 SL -534-SA6-SB-0.0-0.5 SL -534-SA6-SB-3.0-4.0 SL -536-SA6-SB-0.0-0.5 SL -546-SA6-SB-0.0-0.5 SL -546-SA6-SB-6.5-7.5 SL -549-SA6-SB-0.0-0.5 SL -626-SA6-SB-0.0-0.5 SL -627-SA6-SB-0.0-0.5 SL -627-SA6-SB-1.0-2.0 SL -628-SA6-SB-0.0-0.5 SL -628-SA6-SB-4.0-5.0 SL -629-SA6-SB-0.0-0.5 SL -629-SA6-SB-2.5-3.5 SL -630-SA6-SB-0.0-0.5 SL -631-SA6-SB-0.0-0.5 SL -632-SA6-SB-0.0-0.5)	IRON	-380	-767	75.00-125.00	-	IRON	No Qual, >4x

Project Name and Number: CDM_SSFL_120730_TA - CDM, Santa Susana Field Lab

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-549-SA6-SB-0.0-0.5MS (TOT) (SL-529-SA6-SB-0.0-0.5 SL -531-SA6-SB-0.0-0.5 SL -532-SA6-SB-0.0-0.5 SL -533-SA6-SB-0.0-0.5 SL -534-SA6-SB-0.0-0.5 SL -534-SA6-SB-3.0-4.0 SL -536-SA6-SB-0.0-0.5 SL -546-SA6-SB-0.0-0.5 SL -546-SA6-SB-6.5-7.5 SL -549-SA6-SB-0.0-0.5 SL -626-SA6-SB-0.0-0.5 SL -627-SA6-SB-0.0-0.5 SL -627-SA6-SB-1.0-2.0 SL -628-SA6-SB-0.0-0.5 SL -628-SA6-SB-4.0-5.0 SL -629-SA6-SB-0.0-0.5 SL -629-SA6-SB-2.5-3.5 SL -630-SA6-SB-0.0-0.5 SL -631-SA6-SB-0.0-0.5 SL -632-SA6-SB-0.0-0.5)	CHROMIUM	132	-	75.00-125.00	-	CHROMIUM	J(all detects)
SL-549-SA6-SB-0.0-0.5MS (TOT) **SL-549-SA6-SB-0.0-0.5MSD (TOT)** (SL-529-SA6-SB-0.0-0.5 SL -531-SA6-SB-0.0-0.5 SL -532-SA6-SB-0.0-0.5 SL -533-SA6-SB-0.0-0.5 SL -534-SA6-SB-0.0-0.5 SL -534-SA6-SB-3.0-4.0 SL -536-SA6-SB-0.0-0.5 SL -546-SA6-SB-0.0-0.5 SL -546-SA6-SB-6.5-7.5 SL -549-SA6-SB-0.0-0.5 SL -626-SA6-SB-0.0-0.5 SL -627-SA6-SB-0.0-0.5 SL -627-SA6-SB-1.0-2.0 SL -628-SA6-SB-0.0-0.5 SL -628-SA6-SB-4.0-5.0 SL -629-SA6-SB-0.0-0.5 SL -629-SA6-SB-2.5-3.5 SL -630-SA6-SB-0.0-0.5 SL -631-SA6-SB-0.0-0.5 SL -632-SA6-SB-0.0-0.5)	ANTIMONY	13	12	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike = 97%

Method: 8081B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-626-SA6-SB-0.0-0.5MS **SL-626-SA6-SB-0.0-0.5MSD** (SL-626-SA6-SB-0.0-0.5)	TOXAPHENE	1087	1055	19.00-174.00	-	TOXAPHENE	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: **8082A**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-626-SA6-SB-0.0-0.5MS **SL-626-SA6-SB-0.0-0.5MSD** (SL-626-SA6-SB-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	146 139	186 162	54.00-132.00 62.00-129.00	- -	AROCLOR 1016 AROCLOR 1221 AROCLOR 1232 AROCLOR 1242 AROCLOR 1248 AROCLOR 1254 AROCLOR 1260 AROCLOR 1262 AROCLOR 1268	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-529-SA6-SB-0.0-0.5	ALUMINUM	J	13000	22000	MRL	mg/Kg	
	BORON	J	1.5	11	MRL	mg/Kg	
	LITHIUM	J	24	41	MRL	mg/Kg	
	MANGANESE	J	230	540	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2900	7000	MRL	mg/Kg	
	SODIUM	J	130	550	MRL	mg/Kg	
	TIN	J	3.3	12	MRL	mg/Kg	
	Zirconium	J	1.4	9.5	MRL	mg/Kg	
SL-531-SA6-SB-0.0-0.5	ALUMINUM	J	10000	23000	MRL	mg/Kg	
	LITHIUM	J	25	43	MRL	mg/Kg	
	MANGANESE	J	240	580	MRL	mg/Kg	
	POTASSIUM	J	2800	7500	MRL	mg/Kg	J (all detects)
	SODIUM	J	79	580	MRL	mg/Kg	
	TIN	J	3.3	13	MRL	mg/Kg	
	Zirconium	J	1.1	10	MRL	mg/Kg	
SL-532-SA6-SB-0.0-0.5	ALUMINUM	J	12000	23000	MRL	mg/Kg	
	BORON	J	2.1	11	MRL	mg/Kg	
	LITHIUM	J	19	42	MRL	mg/Kg	
	MANGANESE	J	270	570	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2800	7300	MRL	mg/Kg	
	SODIUM	J	130	570	MRL	mg/Kg	
	TIN	J	3.6	12	MRL	mg/Kg	
	Zirconium	J	1.2	9.9	MRL	mg/Kg	
SL-533-SA6-SB-0.0-0.5	ALUMINUM	J	12000	21000	MRL	mg/Kg	
	BORON	J	1.6	10	MRL	mg/Kg	
	LITHIUM	J	27	39	MRL	mg/Kg	
	MANGANESE	J	320	520	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3600	6700	MRL	mg/Kg	
	SODIUM	J	76	520	MRL	mg/Kg	
	TIN	J	3.2	11	MRL	mg/Kg	
	Zirconium	J	1.4	9.0	MRL	mg/Kg	
SL-534-SA6-SB-0.0-0.5	ALUMINUM	J	13000	22000	MRL	mg/Kg	
	BORON	J	1.8	11	MRL	mg/Kg	
	LITHIUM	J	25	40	MRL	mg/Kg	
	MANGANESE	J	300	540	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3300	7000	MRL	mg/Kg	
	SODIUM	J	100	540	MRL	mg/Kg	
	TIN	J	3.6	12	MRL	mg/Kg	
	Zirconium	J	1.5	9.4	MRL	mg/Kg	
SL-534-SA6-SB-3.0-4.0	BORON	J	1.1	9.1	MRL	mg/Kg	
	LITHIUM	J	26	35	MRL	mg/Kg	
	MANGANESE	J	150	460	MRL	mg/Kg	
	POTASSIUM	J	2000	6000	MRL	mg/Kg	J (all detects)
	SODIUM	J	200	470	MRL	mg/Kg	
	TIN	J	3.5	10	MRL	mg/Kg	
	Zirconium	J	1.4	8.1	MRL	mg/Kg	
SL-536-SA6-SB-0.0-0.5	ALUMINUM	J	11000	20000	MRL	mg/Kg	
	LITHIUM	J	16	38	MRL	mg/Kg	
	MANGANESE	J	170	500	MRL	mg/Kg	
	POTASSIUM	J	2300	6500	MRL	mg/Kg	J (all detects)
	SODIUM	J	170	510	MRL	mg/Kg	
	TIN	J	4.1	11	MRL	mg/Kg	
	Zirconium	J	0.86	8.8	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-546-SA6-SB-0.0-0.5	ALUMINUM	J	9400	18000	MRL	mg/Kg	
	LITHIUM	J	22	34	MRL	mg/Kg	
	MANGANESE	J	210	450	MRL	mg/Kg	
	POTASSIUM	J	2600	5800	MRL	mg/Kg	J (all detects)
	SODIUM	J	100	450	MRL	mg/Kg	
	TIN	J	3.4	9.9	MRL	mg/Kg	
	Zirconium	J	0.74	7.8	MRL	mg/Kg	
SL-546-SA6-SB-6.5-7.5	ALUMINUM	J	11000	21000	MRL	mg/Kg	
	LITHIUM	J	9.7	39	MRL	mg/Kg	
	MANGANESE	J	110	520	MRL	mg/Kg	
	POTASSIUM	J	2400	6700	MRL	mg/Kg	J (all detects)
	SODIUM	J	150	530	MRL	mg/Kg	
	TIN	J	3.6	11	MRL	mg/Kg	
	Zirconium	J	0.91	9.1	MRL	mg/Kg	
SL-549-SA6-SB-0.0-0.5	ALUMINUM	J	9700	21000	MRL	mg/Kg	
	LITHIUM	J	24	39	MRL	mg/Kg	
	MANGANESE	J	240	520	MRL	mg/Kg	
	POTASSIUM	J	2700	6700	MRL	mg/Kg	J (all detects)
	SODIUM	J	100	520	MRL	mg/Kg	
	TIN	J	3.5	11	MRL	mg/Kg	
	Zirconium	J	0.86	9.0	MRL	mg/Kg	
SL-626-SA6-SB-0.0-0.5	ALUMINUM	J	11000	20000	MRL	mg/Kg	
	BORON	J	1.3	9.5	MRL	mg/Kg	
	LITHIUM	J	25	36	MRL	mg/Kg	
	MANGANESE	J	320	480	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	3300	6200	MRL	mg/Kg	
	SODIUM	J	91	490	MRL	mg/Kg	
	TIN	J	3.4	11	MRL	mg/Kg	
	Zirconium	J	1.2	8.4	MRL	mg/Kg	
SL-627-SA6-SB-0.0-0.5	ALUMINUM	J	9800	22000	MRL	mg/Kg	
	BORON	J	1.3	11	MRL	mg/Kg	
	LITHIUM	J	20	40	MRL	mg/Kg	
	MANGANESE	J	240	540	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2700	7000	MRL	mg/Kg	
	SODIUM	J	82	540	MRL	mg/Kg	
	TIN	J	3.0	12	MRL	mg/Kg	
	Zirconium	J	1.2	9.4	MRL	mg/Kg	
SL-627-SA6-SB-1.0-2.0	ALUMINUM	J	9900	19000	MRL	mg/Kg	
	BORON	J	0.96	9.3	MRL	mg/Kg	
	LITHIUM	J	20	35	MRL	mg/Kg	
	MANGANESE	J	410	470	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2600	6100	MRL	mg/Kg	
	SODIUM	J	80	480	MRL	mg/Kg	
	TIN	J	2.8	10	MRL	mg/Kg	
	Zirconium	J	1.1	8.2	MRL	mg/Kg	
SL-628-SA6-SB-0.0-0.5	ALUMINUM	J	10000	20000	MRL	mg/Kg	
	BORON	J	1.7	9.8	MRL	mg/Kg	
	LITHIUM	J	19	38	MRL	mg/Kg	
	MANGANESE	J	230	500	MRL	mg/Kg	J (all detects)
	POTASSIUM	J	2700	6500	MRL	mg/Kg	
	SODIUM	J	86	510	MRL	mg/Kg	
	TIN	J	2.9	11	MRL	mg/Kg	
	Zirconium	J	1.2	8.7	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-628-SA6-SB-4.0-5.0	ALUMINUM	J	11000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	1.3	9.6	MRL	mg/Kg	
	LITHIUM	J	31	37	MRL	mg/Kg	
	MANGANESE	J	220	490	MRL	mg/Kg	
	POTASSIUM	J	1900	6300	MRL	mg/Kg	
	SODIUM	J	150	490	MRL	mg/Kg	
	TIN	J	3.5	11	MRL	mg/Kg	
	Zirconium	J	0.81	8.5	MRL	mg/Kg	
SL-629-SA6-SB-0.0-0.5	ALUMINUM	J	14000	22000	MRL	mg/Kg	J (all detects)
	BORON	J	3.8	11	MRL	mg/Kg	
	LITHIUM	J	23	41	MRL	mg/Kg	
	MANGANESE	J	290	550	MRL	mg/Kg	
	POTASSIUM	J	3500	7200	MRL	mg/Kg	
	SODIUM	J	120	560	MRL	mg/Kg	
	TIN	J	3.9	12	MRL	mg/Kg	
	Zirconium	J	1.4	9.6	MRL	mg/Kg	
SL-629-SA6-SB-2.5-3.5	ALUMINUM	J	13000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	1.4	9.9	MRL	mg/Kg	
	LITHIUM	J	32	38	MRL	mg/Kg	
	MANGANESE	J	230	510	MRL	mg/Kg	
	POTASSIUM	J	3100	6600	MRL	mg/Kg	
	SODIUM	J	130	510	MRL	mg/Kg	
	TIN	J	3.7	11	MRL	mg/Kg	
	Zirconium	J	1.5	8.8	MRL	mg/Kg	
SL-630-SA6-SB-0.0-0.5	ALUMINUM	J	13000	22000	MRL	mg/Kg	J (all detects)
	BORON	J	3.6	11	MRL	mg/Kg	
	LITHIUM	J	24	41	MRL	mg/Kg	
	MANGANESE	J	320	540	MRL	mg/Kg	
	POTASSIUM	J	3800	7000	MRL	mg/Kg	
	SODIUM	J	75	550	MRL	mg/Kg	
	TIN	J	3.6	12	MRL	mg/Kg	
	Zirconium	J	1.5	9.5	MRL	mg/Kg	
SL-631-SA6-SB-0.0-0.5	ALUMINUM	J	12000	20000	MRL	mg/Kg	J (all detects)
	BORON	J	3.7	9.9	MRL	mg/Kg	
	LITHIUM	J	24	38	MRL	mg/Kg	
	MANGANESE	J	400	510	MRL	mg/Kg	
	POTASSIUM	J	4100	6600	MRL	mg/Kg	
	SODIUM	J	87	510	MRL	mg/Kg	
	TIN	J	3.7	11	MRL	mg/Kg	
	Zirconium	J	1.4	8.8	MRL	mg/Kg	
SL-632-SA6-SB-0.0-0.5	ALUMINUM	J	12000	21000	MRL	mg/Kg	J (all detects)
	BORON	J	1.6	10	MRL	mg/Kg	
	LITHIUM	J	23	38	MRL	mg/Kg	
	MANGANESE	J	240	510	MRL	mg/Kg	
	POTASSIUM	J	3600	6600	MRL	mg/Kg	
	SODIUM	J	62	520	MRL	mg/Kg	
	TIN	J	3.5	11	MRL	mg/Kg	
	Zirconium	J	1.2	8.9	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-529-SA6-SB-0.0-0.5	ANTIMONY	J	0.023	8.7	MRL	mg/Kg	
	ARSENIC	J	5.7	15	MRL	mg/Kg	
	BARIUM	J	94	140	MRL	mg/Kg	
	BERYLLIUM	J	0.71	1.1	MRL	mg/Kg	
	CADMIUM	J	0.26	1.0	MRL	mg/Kg	
	CHROMIUM	J	17	37	MRL	mg/Kg	
	COBALT	J	6.3	21	MRL	mg/Kg	
	COPPER	J	10	29	MRL	mg/Kg	J (all detects)
	LEAD	J	11	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	5.3	MRL	mg/Kg	
	NICKEL	J	12	29	MRL	mg/Kg	
	SILVER	J	0.050	0.79	MRL	mg/Kg	
	THALLIUM	J	0.36	0.46	MRL	mg/Kg	
	VANADIUM	J	33	62	MRL	mg/Kg	
	ZINC	J	68	110	MRL	mg/Kg	
SL-531-SA6-SB-0.0-0.5	ANTIMONY	J	0.020	8.6	MRL	mg/Kg	
	ARSENIC	J	4.3	15	MRL	mg/Kg	
	BARIUM	J	68	140	MRL	mg/Kg	
	BERYLLIUM	J	0.45	1.1	MRL	mg/Kg	
	CADMIUM	J	0.16	0.98	MRL	mg/Kg	
	CHROMIUM	J	15	36	MRL	mg/Kg	
	COBALT	J	5.0	21	MRL	mg/Kg	
	COPPER	J	6.0	29	MRL	mg/Kg	J (all detects)
	LEAD	J	6.7	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.35	5.2	MRL	mg/Kg	
	NICKEL	J	8.8	29	MRL	mg/Kg	
	SELENIUM	J	0.58	0.64	MRL	mg/Kg	
	SILVER	J	0.028	0.78	MRL	mg/Kg	
	THALLIUM	J	0.26	0.45	MRL	mg/Kg	
	VANADIUM	J	29	61	MRL	mg/Kg	
	ZINC	J	53	110	MRL	mg/Kg	
SL-532-SA6-SB-0.0-0.5	ANTIMONY	J	0.026	9.2	MRL	mg/Kg	
	ARSENIC	J	4.4	16	MRL	mg/Kg	
	BARIUM	J	120	150	MRL	mg/Kg	
	BERYLLIUM	J	0.43	1.2	MRL	mg/Kg	
	CADMIUM	J	0.54	1.1	MRL	mg/Kg	
	CHROMIUM	J	19	39	MRL	mg/Kg	
	COBALT	J	6.6	22	MRL	mg/Kg	
	COPPER	J	15	31	MRL	mg/Kg	J (all detects)
	LEAD	J	17	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.48	5.6	MRL	mg/Kg	
	NICKEL	J	10	31	MRL	mg/Kg	
	SELENIUM	J	0.61	0.69	MRL	mg/Kg	
	SILVER	J	0.046	0.83	MRL	mg/Kg	
	THALLIUM	J	0.22	0.48	MRL	mg/Kg	
	VANADIUM	J	41	65	MRL	mg/Kg	
	ZINC	J	89	120	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-533-SA6-SB-0.0-0.5	ANTIMONY	J	0.025	9.4	MRL	mg/Kg	
	ARSENIC	J	5.0	16	MRL	mg/Kg	
	BARIUM	J	96	150	MRL	mg/Kg	
	BERYLLIUM	J	0.59	1.2	MRL	mg/Kg	
	CADMIUM	J	0.31	1.1	MRL	mg/Kg	
	CHROMIUM	J	17	40	MRL	mg/Kg	
	COBALT	J	5.6	23	MRL	mg/Kg	
	COPPER	J	9.0	31	MRL	mg/Kg	J (all detects)
	LEAD	J	12	37	MRL	mg/Kg	
	MOLYBDENUM	J	0.45	5.7	MRL	mg/Kg	
	NICKEL	J	12	31	MRL	mg/Kg	
	SILVER	J	0.062	0.86	MRL	mg/Kg	
	THALLIUM	J	0.30	0.50	MRL	mg/Kg	
	VANADIUM	J	28	67	MRL	mg/Kg	
	ZINC	J	65	120	MRL	mg/Kg	
SL-534-SA6-SB-0.0-0.5	ANTIMONY	J	0.022	9.3	MRL	mg/Kg	
	ARSENIC	J	3.3	16	MRL	mg/Kg	
	BARIUM	J	100	150	MRL	mg/Kg	
	BERYLLIUM	J	0.68	1.2	MRL	mg/Kg	
	CADMIUM	J	0.44	1.1	MRL	mg/Kg	
	CHROMIUM	J	15	39	MRL	mg/Kg	
	COBALT	J	5.1	22	MRL	mg/Kg	
	COPPER	J	8.3	31	MRL	mg/Kg	J (all detects)
	LEAD	J	13	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.52	5.7	MRL	mg/Kg	
	NICKEL	J	11	31	MRL	mg/Kg	
	SILVER	J	0.082	0.84	MRL	mg/Kg	
	THALLIUM	J	0.30	0.49	MRL	mg/Kg	
	VANADIUM	J	28	66	MRL	mg/Kg	
	ZINC	J	77	120	MRL	mg/Kg	
SL-534-SA6-SB-3.0-4.0	ARSENIC	J	3.7	15	MRL	mg/Kg	
	BARIUM	J	72	140	MRL	mg/Kg	
	BERYLLIUM	J	0.71	1.1	MRL	mg/Kg	
	CADMIUM	J	0.13	1.0	MRL	mg/Kg	
	CHROMIUM	J	15	38	MRL	mg/Kg	
	COBALT	J	4.4	22	MRL	mg/Kg	
	COPPER	J	5.6	30	MRL	mg/Kg	J (all detects)
	LEAD	J	6.1	35	MRL	mg/Kg	
	MOLYBDENUM	J	0.51	5.5	MRL	mg/Kg	
	NICKEL	J	9.6	30	MRL	mg/Kg	
	SILVER	J	0.062	0.81	MRL	mg/Kg	
	THALLIUM	J	0.27	0.47	MRL	mg/Kg	
	VANADIUM	J	29	64	MRL	mg/Kg	
	ZINC	J	54	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-536-SA6-SB-0.0-0.5	ANTIMONY	J	0.016	8.9	MRL	mg/Kg	
	ARSENIC	J	8.4	15	MRL	mg/Kg	
	BARIUM	J	100	140	MRL	mg/Kg	
	BERYLLIUM	J	0.71	1.1	MRL	mg/Kg	
	CADMIUM	J	0.12	1.0	MRL	mg/Kg	
	CHROMIUM	J	17	37	MRL	mg/Kg	
	COBALT	J	5.4	21	MRL	mg/Kg	J (all detects)
	COPPER	J	12	30	MRL	mg/Kg	
	LEAD	J	9.3	35	MRL	mg/Kg	
	MOLYBDENUM	J	1.1	5.4	MRL	mg/Kg	
	NICKEL	J	8.3	30	MRL	mg/Kg	
	SILVER	J	0.045	0.80	MRL	mg/Kg	
	VANADIUM	J	41	63	MRL	mg/Kg	
	ZINC	J	70	110	MRL	mg/Kg	
SL-546-SA6-SB-0.0-0.5	ANTIMONY	J	0.015	8.4	MRL	mg/Kg	
	ARSENIC	J	2.3	14	MRL	mg/Kg	
	BARIUM	J	77	140	MRL	mg/Kg	
	BERYLLIUM	J	0.36	1.1	MRL	mg/Kg	
	CADMIUM	J	0.12	0.97	MRL	mg/Kg	
	CHROMIUM	J	13	36	MRL	mg/Kg	
	COBALT	J	4.5	20	MRL	mg/Kg	
	COPPER	J	5.9	28	MRL	mg/Kg	J (all detects)
	LEAD	J	3.2	33	MRL	mg/Kg	
	MOLYBDENUM	J	0.21	5.1	MRL	mg/Kg	
	NICKEL	J	8.5	28	MRL	mg/Kg	
	SELENIUM	J	0.59	0.63	MRL	mg/Kg	
	SILVER	J	0.020	0.76	MRL	mg/Kg	
	THALLIUM	J	0.22	0.44	MRL	mg/Kg	
	VANADIUM	J	27	60	MRL	mg/Kg	
	ZINC	J	53	110	MRL	mg/Kg	
SL-546-SA6-SB-6.5-7.5	ARSENIC	J	4.7	15	MRL	mg/Kg	
	BARIUM	J	34	140	MRL	mg/Kg	
	BERYLLIUM	J	0.49	1.1	MRL	mg/Kg	
	CADMIUM	J	0.069	1.0	MRL	mg/Kg	
	CHROMIUM	J	7.4	37	MRL	mg/Kg	
	COBALT	J	2.0	21	MRL	mg/Kg	J (all detects)
	COPPER	J	3.5	29	MRL	mg/Kg	
	LEAD	J	5.7	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.42	5.3	MRL	mg/Kg	
	NICKEL	J	3.2	29	MRL	mg/Kg	
	VANADIUM	J	26	62	MRL	mg/Kg	
	ZINC	J	54	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-549-SA6-SB-0.0-0.5	ANTIMONY	J	0.016	9.1	MRL	mg/Kg	
	ARSENIC	J	3.1	16	MRL	mg/Kg	
	BARIUM	J	76	150	MRL	mg/Kg	
	BERYLLIUM	J	0.40	1.2	MRL	mg/Kg	
	CADMIUM	J	0.13	1.0	MRL	mg/Kg	
	CHROMIUM	J	14	39	MRL	mg/Kg	
	COBALT	J	5.2	22	MRL	mg/Kg	
	COPPER	J	7.2	30	MRL	mg/Kg	J (all detects)
	LEAD	J	3.8	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.22	5.6	MRL	mg/Kg	
	NICKEL	J	8.3	30	MRL	mg/Kg	
	SELENIUM	J	0.61	0.69	MRL	mg/Kg	
	THALLIUM	J	0.27	0.48	MRL	mg/Kg	
	VANADIUM	J	29	65	MRL	mg/Kg	
	ZINC	J	61	120	MRL	mg/Kg	
SL-626-SA6-SB-0.0-0.5	ANTIMONY	J	0.026	9.6	MRL	mg/Kg	
	ARSENIC	J	4.4	16	MRL	mg/Kg	
	BARIUM	J	83	150	MRL	mg/Kg	
	BERYLLIUM	J	0.46	1.2	MRL	mg/Kg	
	CADMIUM	J	0.29	1.1	MRL	mg/Kg	
	CHROMIUM	J	22	40	MRL	mg/Kg	
	COBALT	J	6.1	23	MRL	mg/Kg	
	COPPER	J	11	32	MRL	mg/Kg	J (all detects)
	LEAD	J	9.9	37	MRL	mg/Kg	
	MOLYBDENUM	J	0.30	5.8	MRL	mg/Kg	
	NICKEL	J	15	32	MRL	mg/Kg	
	SELENIUM	J	0.53	0.72	MRL	mg/Kg	
	SILVER	J	0.17	0.87	MRL	mg/Kg	
	THALLIUM	J	0.23	0.51	MRL	mg/Kg	
	VANADIUM	J	37	68	MRL	mg/Kg	
	ZINC	J	100	120	MRL	mg/Kg	
SL-627-SA6-SB-0.0-0.5	ANTIMONY	J	0.021	8.8	MRL	mg/Kg	
	ARSENIC	J	3.2	15	MRL	mg/Kg	
	BARIUM	J	68	140	MRL	mg/Kg	
	BERYLLIUM	J	0.38	1.1	MRL	mg/Kg	
	CADMIUM	J	0.26	1.0	MRL	mg/Kg	
	CHROMIUM	J	14	37	MRL	mg/Kg	
	COBALT	J	4.8	21	MRL	mg/Kg	
	COPPER	J	7.3	29	MRL	mg/Kg	J (all detects)
	LEAD	J	12	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.28	5.4	MRL	mg/Kg	
	NICKEL	J	9.5	29	MRL	mg/Kg	
	SELENIUM	J	0.52	0.66	MRL	mg/Kg	
	SILVER	J	0.13	0.80	MRL	mg/Kg	
	THALLIUM	J	0.19	0.47	MRL	mg/Kg	
	VANADIUM	J	24	63	MRL	mg/Kg	
	ZINC	J	63	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-627-SA6-SB-1.0-2.0	ANTIMONY	J	0.028	9.1	MRL	mg/Kg	
	ARSENIC	J	3.9	16	MRL	mg/Kg	
	BARIUM	J	69	150	MRL	mg/Kg	
	BERYLLIUM	J	0.44	1.2	MRL	mg/Kg	
	CADMIUM	J	0.29	1.0	MRL	mg/Kg	
	CHROMIUM	J	17	38	MRL	mg/Kg	
	COBALT	J	5.0	22	MRL	mg/Kg	
	COPPER	J	11	30	MRL	mg/Kg	J (all detects)
	LEAD	J	15	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.38	5.5	MRL	mg/Kg	
	NICKEL	J	12	30	MRL	mg/Kg	
	SELENIUM	J	0.54	0.69	MRL	mg/Kg	
	SILVER	J	0.17	0.83	MRL	mg/Kg	
	THALLIUM	J	0.19	0.48	MRL	mg/Kg	
	VANADIUM	J	27	65	MRL	mg/Kg	
	ZINC	J	73	120	MRL	mg/Kg	
SL-628-SA6-SB-0.0-0.5	ANTIMONY	J	0.037	9.5	MRL	mg/Kg	
	ARSENIC	J	3.7	16	MRL	mg/Kg	
	BARIUM	J	76	150	MRL	mg/Kg	
	BERYLLIUM	J	0.47	1.2	MRL	mg/Kg	
	CADMIUM	J	0.49	1.1	MRL	mg/Kg	
	CHROMIUM	J	16	40	MRL	mg/Kg	
	COBALT	J	5.3	23	MRL	mg/Kg	
	COPPER	J	11	32	MRL	mg/Kg	J (all detects)
	LEAD	J	26	37	MRL	mg/Kg	
	MOLYBDENUM	J	0.39	5.8	MRL	mg/Kg	
	NICKEL	J	13	32	MRL	mg/Kg	
	SELENIUM	J	0.60	0.71	MRL	mg/Kg	
	SILVER	J	0.43	0.86	MRL	mg/Kg	
	THALLIUM	J	0.20	0.50	MRL	mg/Kg	
	VANADIUM	J	28	68	MRL	mg/Kg	
	ZINC	J	90	120	MRL	mg/Kg	
SL-628-SA6-SB-4.0-5.0	ANTIMONY	J	0.020	8.7	MRL	mg/Kg	
	ARSENIC	J	5.2	15	MRL	mg/Kg	
	BARIUM	J	82	140	MRL	mg/Kg	
	BERYLLIUM	J	0.48	1.1	MRL	mg/Kg	
	CADMIUM	J	0.15	1.0	MRL	mg/Kg	
	CHROMIUM	J	21	37	MRL	mg/Kg	
	COBALT	J	6.4	21	MRL	mg/Kg	
	COPPER	J	10	29	MRL	mg/Kg	J (all detects)
	LEAD	J	5.7	34	MRL	mg/Kg	
	MOLYBDENUM	J	0.27	5.3	MRL	mg/Kg	
	NICKEL	J	15	29	MRL	mg/Kg	
	SELENIUM	J	0.64	0.65	MRL	mg/Kg	
	SILVER	J	0.11	0.79	MRL	mg/Kg	
	THALLIUM	J	0.22	0.46	MRL	mg/Kg	
	VANADIUM	J	38	62	MRL	mg/Kg	
	ZINC	J	59	110	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-629-SA6-SB-0.0-0.5	ANTIMONY	J	0.039	9.6	MRL	mg/Kg	J (all detects)
	ARSENIC	J	4.6	16	MRL	mg/Kg	
	BARIUM	J	94	150	MRL	mg/Kg	
	BERYLLIUM	J	0.52	1.2	MRL	mg/Kg	
	CADMIUM	J	0.67	1.1	MRL	mg/Kg	
	CHROMIUM	J	21	40	MRL	mg/Kg	
	COBALT	J	6.2	23	MRL	mg/Kg	
	COPPER	J	14	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.56	5.8	MRL	mg/Kg	
	NICKEL	J	15	32	MRL	mg/Kg	
	SELENIUM	J	0.65	0.72	MRL	mg/Kg	
	SILVER	J	0.59	0.87	MRL	mg/Kg	
	THALLIUM	J	0.26	0.51	MRL	mg/Kg	
	VANADIUM	J	36	68	MRL	mg/Kg	
SL-629-SA6-SB-2.5-3.5	ANTIMONY	J	0.019	8.3	MRL	mg/Kg	J (all detects)
	ARSENIC	J	6.4	14	MRL	mg/Kg	
	BARIUM	J	89	130	MRL	mg/Kg	
	BERYLLIUM	J	0.65	1.0	MRL	mg/Kg	
	CADMIUM	J	0.24	0.95	MRL	mg/Kg	
	CHROMIUM	J	26	35	MRL	mg/Kg	
	COBALT	J	6.7	20	MRL	mg/Kg	
	COPPER	J	11	28	MRL	mg/Kg	
	LEAD	J	8.1	32	MRL	mg/Kg	
	MOLYBDENUM	J	0.38	5.0	MRL	mg/Kg	
	NICKEL	J	17	28	MRL	mg/Kg	
	SILVER	J	0.15	0.75	MRL	mg/Kg	
	THALLIUM	J	0.29	0.44	MRL	mg/Kg	
	VANADIUM	J	45	59	MRL	mg/Kg	
	ZINC	J	65	100	MRL	mg/Kg	
SL-630-SA6-SB-0.0-0.5	ANTIMONY	J	0.041	10	MRL	mg/Kg	J (all detects)
	ARSENIC	J	6.3	17	MRL	mg/Kg	
	BARIUM	J	110	160	MRL	mg/Kg	
	BERYLLIUM	J	0.71	1.3	MRL	mg/Kg	
	CADMIUM	J	0.34	1.2	MRL	mg/Kg	
	CHROMIUM	J	26	43	MRL	mg/Kg	
	COBALT	J	7.9	24	MRL	mg/Kg	
	COPPER	J	13	34	MRL	mg/Kg	
	LEAD	J	17	40	MRL	mg/Kg	
	MOLYBDENUM	J	0.57	6.2	MRL	mg/Kg	
	NICKEL	J	17	34	MRL	mg/Kg	
	SELENIUM	J	0.74	0.76	MRL	mg/Kg	
	SILVER	J	0.12	0.92	MRL	mg/Kg	
	THALLIUM	J	0.31	0.53	MRL	mg/Kg	
	VANADIUM	J	47	72	MRL	mg/Kg	
	ZINC	J	81	130	MRL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-631-SA6-SB-0.0-0.5	ANTIMONY	J	0.033	9.3	MRL	mg/Kg	
	ARSENIC	J	4.6	16	MRL	mg/Kg	
	BARIUM	J	88	150	MRL	mg/Kg	
	BERYLLIUM	J	0.50	1.2	MRL	mg/Kg	
	CADMIUM	J	0.30	1.1	MRL	mg/Kg	
	CHROMIUM	J	19	39	MRL	mg/Kg	
	COBALT	J	5.9	22	MRL	mg/Kg	
	COPPER	J	9.8	31	MRL	mg/Kg	J (all detects)
	LEAD	J	14	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.39	5.7	MRL	mg/Kg	
	NICKEL	J	14	31	MRL	mg/Kg	
	SELENIUM	J	0.67	0.70	MRL	mg/Kg	
	SILVER	J	0.11	0.85	MRL	mg/Kg	
	THALLIUM	J	0.25	0.49	MRL	mg/Kg	
	VANADIUM	J	34	66	MRL	mg/Kg	
	ZINC	J	72	120	MRL	mg/Kg	
SL-632-SA6-SB-0.0-0.5	ANTIMONY	J	0.026	9.2	MRL	mg/Kg	
	ARSENIC	J	4.8	16	MRL	mg/Kg	
	BARIUM	J	69	150	MRL	mg/Kg	
	BERYLLIUM	J	0.46	1.2	MRL	mg/Kg	
	CADMIUM	J	0.21	1.1	MRL	mg/Kg	
	CHROMIUM	J	19	39	MRL	mg/Kg	
	COBALT	J	5.7	22	MRL	mg/Kg	
	COPPER	J	9.1	31	MRL	mg/Kg	J (all detects)
	LEAD	J	12	36	MRL	mg/Kg	
	MOLYBDENUM	J	0.34	5.6	MRL	mg/Kg	
	NICKEL	J	13	31	MRL	mg/Kg	
	SELENIUM	J	0.61	0.69	MRL	mg/Kg	
	SILVER	J	0.084	0.83	MRL	mg/Kg	
	THALLIUM	J	0.25	0.48	MRL	mg/Kg	
	VANADIUM	J	36	65	MRL	mg/Kg	
	ZINC	J	61	120	MRL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-531-SA6-SB-0.0-0.5	MERCURY	J	0.014	0.026	MRL	mg/Kg	J (all detects)
SL-534-SA6-SB-3.0-4.0	MERCURY	J	0.014	0.023	MRL	mg/Kg	J (all detects)
SL-536-SA6-SB-0.0-0.5	MERCURY	J	0.0091	0.026	MRL	mg/Kg	J (all detects)
SL-626-SA6-SB-0.0-0.5	MERCURY	J	0.014	0.024	MRL	mg/Kg	J (all detects)
SL-627-SA6-SB-0.0-0.5	MERCURY	J	0.013	0.024	MRL	mg/Kg	J (all detects)
SL-627-SA6-SB-1.0-2.0	MERCURY	J	0.014	0.026	MRL	mg/Kg	J (all detects)
SL-628-SA6-SB-4.0-5.0	MERCURY	J	0.012	0.024	MRL	mg/Kg	J (all detects)
SL-629-SA6-SB-2.5-3.5	MERCURY	J	0.011	0.024	MRL	mg/Kg	J (all detects)
SL-630-SA6-SB-0.0-0.5	MERCURY	J	0.024	0.028	MRL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-631-SA6-SB-0.0-0.5	MERCURY	J	0.025	0.028	MRL	mg/Kg	J (all detects)
SL-632-SA6-SB-0.0-0.5	MERCURY	J	0.024	0.027	MRL	mg/Kg	J (all detects)

Method: 8015B EFH

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-529-SA6-SB-0.0-0.5	EFH(C21-C30)	J	3.2	5.6	MRL	mg/Kg	J (all detects)
SL-531-SA6-SB-0.0-0.5	EFH(C21-C30) EFH(C30-C40)	J J	1.5 5.9	5.8 12	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-533-SA6-SB-0.0-0.5	EFH(C21-C30)	J	2.3	5.7	MRL	mg/Kg	J (all detects)
SL-534-SA6-SB-0.0-0.5	EFH(C21-C30) EFH(C30-C40)	J J	3.0 11	5.8 12	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-534-SA6-SB-3.0-4.0	EFH(C30-C40)	J	2.9	10	MRL	mg/Kg	J (all detects)
SL-546-SA6-SB-6.5-7.5	TOTAL EFH(C8-C40)	J	0.90	4.2	MRL	mg/Kg	J (all detects)
SL-626-SA6-SB-0.0-0.5	EFH(C15-C20)	J	2.1	5.4	MRL	mg/Kg	J (all detects)
SL-627-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.9	5.7	MRL	mg/Kg	J (all detects)
SL-627-SA6-SB-1.0-2.0	EFH(C15-C20)	J	1.5	5.6	MRL	mg/Kg	J (all detects)
SL-628-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.9	5.7	MRL	mg/Kg	J (all detects)
SL-628-SA6-SB-4.0-5.0	EFH(C21-C30) EFH(C30-C40)	J J	1.2 7.0	5.1 10	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-629-SA6-SB-0.0-0.5	EFH(C15-C20) EFH(C8-C11)	J J	3.9 1.3	6.1 6.1	MRL MRL	mg/Kg mg/Kg	J (all detects)
SL-629-SA6-SB-2.5-3.5	EFH(C21-C30)	J	3.7	5.1	MRL	mg/Kg	J (all detects)
SL-630-SA6-SB-0.0-0.5	EFH(C15-C20)	J	5.2	6.3	MRL	mg/Kg	J (all detects)
SL-631-SA6-SB-0.0-0.5	EFH(C15-C20)	J	1.9	6.1	MRL	mg/Kg	J (all detects)
SL-632-SA6-SB-0.0-0.5	EFH(C15-C20)	J	4.0	5.7	MRL	mg/Kg	J (all detects)

Method: 8015B GRO

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-534-SA6-SB-3.5	GASOLINE RANGE ORGANICS (C4-C12)	J	0.33	1.0	MRL	mg/Kg	J (all detects)
SL-627-SA6-SB-1.5	GASOLINE RANGE ORGANICS (C4-C12)	J	0.47	1.3	MRL	mg/Kg	J (all detects)
SL-629-SA6-SB-3.0	GASOLINE RANGE ORGANICS (C4-C12)	J	0.39	1.1	MRL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8081B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-626-SA6-SB-0.0-0.5	4,4'-DDE	J p	1.2	3.7	MRL	ug/Kg	J (all detects)
SL-628-SA6-SB-0.0-0.5	4,4'-DDE	J p	2.7	3.8	MRL	ug/Kg	J (all detects)
SL-628-SA6-SB-4.0-5.0	4,4'-DDT	J p	0.85	3.3	MRL	ug/Kg	J (all detects)
SL-630-SA6-SB-0.0-0.5	4,4'-DDE 4,4'-DDT	J J	1.2 2.9	4.0 4.0	MRL MRL	ug/Kg ug/Kg	J (all detects)
SL-632-SA6-SB-0.0-0.5	4,4'-DDE	J	2.8	3.9	MRL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-630-SA6-SB-0.0-0.5	2,4-DB MCPA	J p J	10 2600	96 7800	MRL MRL	ug/Kg ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-529-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.35	11	MRL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J B	0.79	11	MRL	ug/Kg	
	ACENAPHTHENE	J	0.30	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	0.91	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.7	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	11	MRL	ug/Kg	
	CHRYSENE	J	1.7	11	MRL	ug/Kg	
	FLUORANTHENE	J	1.6	11	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	11	MRL	ug/Kg	
	NAPHTHALENE	J	0.43	11	MRL	ug/Kg	
	PHENANTHRENE	J	1.4	11	MRL	ug/Kg	
	PYRENE	J	1.5	11	MRL	ug/Kg	
SL-531-SA6-SB-0.0-0.5	ACENAPHTHENE	J	0.35	12	MRL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.0	12	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	12	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.9	12	MRL	ug/Kg	
	CHRYSENE	J	1.7	12	MRL	ug/Kg	
	FLUORANTHENE	J	2.6	12	MRL	ug/Kg	
	NAPHTHALENE	J	0.40	12	MRL	ug/Kg	
	PHENANTHRENE	J	2.0	12	MRL	ug/Kg	
	PYRENE	J	2.3	12	MRL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-532-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.42	12	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	0.76	12	MRL	ug/Kg	
	ACENAPHTHENE	J	0.62	12	MRL	ug/Kg	
	ACENAPHTHYLENE	J	1.6	12	MRL	ug/Kg	
	ANTHRACENE	J	5.4	12	MRL	ug/Kg	
	BENZO(A)PYRENE	J	11	12	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	6.3	12	MRL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	6.0	12	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.5	12	MRL	ug/Kg	
	FLUORENE	J	0.59	12	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	7.2	12	MRL	ug/Kg	
	NAPHTHALENE	J	0.86	12	MRL	ug/Kg	
	PHENANTHRENE	J	5.1	12	MRL	ug/Kg	
SL-533-SA6-SB-0.0-0.5	ACENAPHTHENE	J	0.22	11	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.34	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.4	11	MRL	ug/Kg	
	CHRYSENE	J	1.4	11	MRL	ug/Kg	
	FLUORANTHENE	J	1.8	11	MRL	ug/Kg	J (all detects)
	FLUORENE	J	0.98	11	MRL	ug/Kg	
	NAPHTHALENE	J	0.53	11	MRL	ug/Kg	
	PHENANTHRENE	J	1.6	11	MRL	ug/Kg	
	PYRENE	J	1.4	11	MRL	ug/Kg	
SL-534-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.40	11	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	0.49	11	MRL	ug/Kg	
	ACENAPHTHENE	J	0.40	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	11	MRL	ug/Kg	
	CHRYSENE	J	1.5	11	MRL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.5	11	MRL	ug/Kg	
	FLUORENE	J	0.59	11	MRL	ug/Kg	
	NAPHTHALENE	J	0.65	11	MRL	ug/Kg	
	PYRENE	J	1.3	11	MRL	ug/Kg	
SL-536-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.95	11	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	0.84	11	MRL	ug/Kg	
	ANTHRACENE	J	1.5	11	MRL	ug/Kg	J (all detects)
	FLUORENE	J	3.3	11	MRL	ug/Kg	
	NAPHTHALENE	J	0.83	11	MRL	ug/Kg	
SL-546-SA6-SB-0.0-0.5	FLUORENE	J	0.59	10	MRL	ug/Kg	J (all detects)
SL-546-SA6-SB-6.5-7.5	FLUORENE	J	0.54	11	MRL	ug/Kg	J (all detects)
SL-549-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	11	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	1.1	11	MRL	ug/Kg	
	ACENAPHTHENE	J	0.46	11	MRL	ug/Kg	
	ANTHRACENE	J	1.3	11	MRL	ug/Kg	J (all detects)
	FLUORANTHENE	J	9.7	11	MRL	ug/Kg	
	FLUORENE	J	1.3	11	MRL	ug/Kg	
	NAPHTHALENE	J	0.78	11	MRL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-626-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.77	11	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	1.1	11	MRL	ug/Kg	
	ACENAPHTHENE	J	0.95	11	MRL	ug/Kg	
	ACENAPHTHYLENE	J	0.78	11	MRL	ug/Kg	
	ANTHRACENE	J	0.78	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	3.3	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	2.1	11	MRL	ug/Kg	J (all detects)
	CHRYSENE	J	3.7	11	MRL	ug/Kg	
	FLUORANTHENE	J	4.5	11	MRL	ug/Kg	
	FLUORENE	J	2.6	11	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	11	MRL	ug/Kg	
	NAPHTHALENE	J	2.8	11	MRL	ug/Kg	
	PHENANTHRENE	J	3.7	11	MRL	ug/Kg	
	PYRENE	J	3.6	11	MRL	ug/Kg	
SL-627-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	11	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	1.7	11	MRL	ug/Kg	
	ACENAPHTHENE	J	1.0	11	MRL	ug/Kg	
	ACENAPHTHYLENE	J	1.4	11	MRL	ug/Kg	
	ANTHRACENE	J	1.6	11	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	2.0	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	2.1	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	6.4	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.2	11	MRL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.5	11	MRL	ug/Kg	
	CHRYSENE	J	7.3	11	MRL	ug/Kg	
	FLUORANTHENE	J	9.2	11	MRL	ug/Kg	
	FLUORENE	J	6.8	11	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	3.2	11	MRL	ug/Kg	
	NAPHTHALENE	J	5.0	11	MRL	ug/Kg	
	PHENANTHRENE	J	9.2	11	MRL	ug/Kg	
	PYRENE	J	7.5	11	MRL	ug/Kg	
SL-627-SA6-SB-1.0-2.0	1-METHYLNAPHTHALENE	J	0.36	11	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	0.66	11	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	11	MRL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	11	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	5.0	11	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	3.6	11	MRL	ug/Kg	J (all detects)
	CHRYSENE	J	3.5	11	MRL	ug/Kg	
	FLUORANTHENE	J	3.1	11	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.9	11	MRL	ug/Kg	
	NAPHTHALENE	J	1.0	11	MRL	ug/Kg	
	PHENANTHRENE	J	2.4	11	MRL	ug/Kg	
	PYRENE	J	2.9	11	MRL	ug/Kg	
SL-628-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	11	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	1.8	11	MRL	ug/Kg	
	ANTHRACENE	J	4.5	11	MRL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	8.4	11	MRL	ug/Kg	
	NAPHTHALENE	J	3.9	11	MRL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: 280-36589-1 **Laboratory: TA DEN**

EDD Filename: 280-36589-1 **eQAPP Name: CDM_SSFL_120907_TA**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-629-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	3.0	12	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	4.8	12	MRL	ug/Kg	
	ANTHRACENE	J	7.1	12	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	7.4	12	MRL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	9.1	12	MRL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.4	12	MRL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	2.3	12	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	10	12	MRL	ug/Kg	
SL-629-SA6-SB-2.5-3.5	BENZO(B)FLUORANTHENE	J	2.0	10	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	10	MRL	ug/Kg	
	CHRYSENE	J	1.7	10	MRL	ug/Kg	
	FLUORANTHENE	J	1.5	10	MRL	ug/Kg	
	FLUORENE	J	0.91	10	MRL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.3	10	MRL	ug/Kg	
	NAPHTHALENE	J	0.38	10	MRL	ug/Kg	
	PHENANTHRENE	J	1.2	10	MRL	ug/Kg	
	PYRENE	J	1.6	10	MRL	ug/Kg	
SL-630-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.5	12	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	2.4	12	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	2.0	12	MRL	ug/Kg	
	BENZO(A)PYRENE	J	2.2	12	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	4.7	12	MRL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	2.9	12	MRL	ug/Kg	J (all detects)
	CHRYSENE	J	5.6	12	MRL	ug/Kg	
	FLUORANTHENE	J	5.5	12	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	2.5	12	MRL	ug/Kg	
	NAPHTHALENE	J	5.6	12	MRL	ug/Kg	
	PHENANTHRENE	J	7.8	12	MRL	ug/Kg	
	PYRENE	J	5.4	12	MRL	ug/Kg	
SL-631-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	3.4	12	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	4.4	12	MRL	ug/Kg	
	ANTHRACENE	J	2.9	12	MRL	ug/Kg	
	BENZO(A)ANTHRACENE	J	2.0	12	MRL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	5.1	12	MRL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	2.4	12	MRL	ug/Kg	
	CHRYSENE	J	6.8	12	MRL	ug/Kg	
	FLUORANTHENE	J	8.6	12	MRL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	2.4	12	MRL	ug/Kg	
	PYRENE	J	7.4	12	MRL	ug/Kg	
SL-632-SA6-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.6	12	MRL	ug/Kg	
	2-METHYLNAPHTHALENE	J B	2.4	12	MRL	ug/Kg	
	ACENAPHTHENE	J	6.6	12	MRL	ug/Kg	
	CHRYSENE	J	3.3	12	MRL	ug/Kg	
	FLUORANTHENE	J	3.8	12	MRL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	2.1	12	MRL	ug/Kg	
	NAPHTHALENE	J	5.6	12	MRL	ug/Kg	
	PHENANTHRENE	J	7.5	12	MRL	ug/Kg	
	PYRENE	J	3.3	12	MRL	ug/Kg	

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 4, 2012

LDC Report Date: April 8, 2013

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: TestAmerica, Inc.

Sample Delivery Group (SDG): 280-36589-1

Sample Identification

SL-529-SA6-SB-0.0-0.5
SL-531-SA6-SB-0.0-0.5
SL-532-SA6-SB-0.0-0.5
SL-533-SA6-SB-0.0-0.5
SL-534-SA6-SB-0.0-0.5
SL-534-SA6-SB-3.0-4.0
SL-626-SA6-SB-0.0-0.5
SL-627-SA6-SB-0.0-0.5
SL-627-SA6-SB-1.0-2.0
SL-628-SA6-SB-0.0-0.5
SL-628-SA6-SB-4.0-5.0
SL-631-SA6-SB-0.0-0.5
SL-632-SA6-SB-0.0-0.5
SL-629-SA6-SB-0.0-0.5
SL-629-SA6-SB-2.5-3.5
SL-630-SA6-SB-0.0-0.5
SL-536-SA6-SB-0.0-0.5
SL-546-SA6-SB-0.0-0.5
SL-546-SA6-SB-6.5-7.5
SL-549-SA6-SB-0.0-0.5
SL-546-SA6-SB-6.5-7.5MS
SL-546-SA6-SB-6.5-7.5MSD

Introduction

This data review covers 22 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 Polynuclear Aromatic Hydrocarbons.

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.

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

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

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

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

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
MB 280-151130/1-A	12/7/13	2-Methylnaphthalene	0.410 ug/Kg	All samples in SDG 280-36589-1

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-529-SA6-SB-0.0-0.5	2-Methylnaphthalene	0.79 ug/Kg	11U ug/Kg
SL-532-SA6-SB-0.0-0.5	2-Methylnaphthalene	0.76 ug/Kg	12U ug/Kg
SL-534-SA6-SB-0.0-0.5	2-Methylnaphthalene	0.49 ug/Kg	11U ug/Kg
SL-626-SA6-SB-0.0-0.5	2-Methylnaphthalene	1.1 ug/Kg	11U ug/Kg
SL-627-SA6-SB-0.0-0.5	2-Methylnaphthalene	1.7 ug/Kg	11U ug/Kg
SL-627-SA6-SB-1.0-2.0	2-Methylnaphthalene	0.66 ug/Kg	11U ug/Kg
SL-628-SA6-SB-0.0-0.5	2-Methylnaphthalene	1.8 ug/Kg	11U ug/Kg
SL-536-SA6-SB-0.0-0.5	2-Methylnaphthalene	0.84 ug/Kg	11U ug/Kg
SL-549-SA6-SB-0.0-0.5	2-Methylnaphthalene	1.1 ug/Kg	11U ug/Kg

Samples EB1-120612, EB2-120612 (both from SDG 280-36711-1), and EB-120512 (from SDG 280-36640-1) were identified as equipment blanks. No polynuclear aromatic hydrocarbon contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB-120512	12/5/12	1-Methylnaphthalene 2-Methylnaphthalene Acenaphthene Fluorene Naphthalene Phenanthrene	0.0087 ug/L 0.0081 ug/L 0.016 ug/L 0.021 ug/L 0.046 ug/L 0.019 ug/L	SL-626-SA6-SB-0.0-0.5 SL-627-SA6-SB-0.0-0.5 SL-627-SA6-SB-1.0-2.0 SL-628-SA6-SB-0.0-0.5 SL-628-SA6-SB-4.0-5.0 SL-631-SA6-SB-0.0-0.5 SL-632-SA6-SB-0.0-0.5 SL-629-SA6-SB-0.0-0.5 SL-629-SA6-SB-2.5-3.5 SL-630-SA6-SB-0.0-0.5
EB1-120612	12/6/12	1-Methylnaphthalene 2-Methylnaphthalene Acenaphthene Fluorene Naphthalene Phenanthrene	0.012 ug/L 0.015 ug/L 0.018 ug/L 0.027 ug/L 0.071 ug/L 0.028 ug/L	SL-534-SA6-SB-3.0-4.0 SL-546-SA6-SB-6.5-7.5

Sample FB-111412 (from SDG 280-35930-1) was identified as a field blank. No polynuclear aromatic hydrocarbon contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
FB-111412	11/14/12	1-Methylnaphthalene 2-Methylnaphthalene Naphthalene Phenanthrene Pyrene	0.010 ug/L 0.013 ug/L 0.054 ug/L 0.025 ug/L 0.014 ug/L	All samples in SDG 280-36589-1

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

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

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) 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

All compound quantitation were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG 280-36589-1	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
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 280-36589-1

SDG	Sample	Compound	Flag	A or P	Reason (Code)
280-36589-1	SL-529-SA6-SB-0.0-0.5 SL-531-SA6-SB-0.0-0.5 SL-532-SA6-SB-0.0-0.5 SL-533-SA6-SB-0.0-0.5 SL-534-SA6-SB-0.0-0.5 SL-534-SA6-SB-3.0-4.0 SL-626-SA6-SB-0.0-0.5 SL-627-SA6-SB-0.0-0.5 SL-627-SA6-SB-1.0-2.0 SL-628-SA6-SB-0.0-0.5 SL-628-SA6-SB-4.0-5.0 SL-631-SA6-SB-0.0-0.5 SL-632-SA6-SB-0.0-0.5 SL-629-SA6-SB-0.0-0.5 SL-629-SA6-SB-2.5-3.5 SL-630-SA6-SB-0.0-0.5 SL-536-SA6-SB-0.0-0.5 SL-546-SA6-SB-0.0-0.5 SL-546-SA6-SB-6.5-7.5 SL-549-SA6-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 280-36589-1

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
280-36589-1	SL-529-SA6-SB-0.0-0.5	2-Methylnaphthalene	11U ug/Kg	A	B
280-36589-1	SL-532-SA6-SB-0.0-0.5	2-Methylnaphthalene	12U ug/Kg	A	B
280-36589-1	SL-534-SA6-SB-0.0-0.5	2-Methylnaphthalene	11U ug/Kg	A	B
280-36589-1	SL-626-SA6-SB-0.0-0.5	2-Methylnaphthalene	11U ug/Kg	A	B
280-36589-1	SL-627-SA6-SB-0.0-0.5	2-Methylnaphthalene	11U ug/Kg	A	B
280-36589-1	SL-627-SA6-SB-1.0-2.0	2-Methylnaphthalene	11U ug/Kg	A	B
280-36589-1	SL-628-SA6-SB-0.0-0.5	2-Methylnaphthalene	11U ug/Kg	A	B
280-36589-1	SL-536-SA6-SB-0.0-0.5	2-Methylnaphthalene	11U ug/Kg	A	B
280-36589-1	SL-549-SA6-SB-0.0-0.5	2-Methylnaphthalene	11U ug/Kg	A	B

Santa Susana Field Laboratory
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 280-36589-1

No Sample Data Qualified in this SDG

LDC #: 29423G2b **VALIDATION COMPLETENESS WORKSHEET** Date: 4/03/13
SDG #: 280-36589-1 Level IV Page: 1 of 1
Laboratory: Test America, Inc. Reviewer: JVC
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: 12/04/12
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	2 RSD ≤ 30 %
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25 %
V.	Blanks	SW	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/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= EB1-120612, EB2-120612 (280-36711-1) EB-120512 (280-36640-1) FB= FB-111412 (280-35930-1)

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

Validated Samples: Soil

1	SL-529-SA6-SB-0.0-0.5	11	SL-628-SA6-SB-4.0-5.0	21	SL-546-SA6-SB-6.5-7.5MS	31	MB 280-151130/LA
2	SL-531-SA6-SB-0.0-0.5	12	SL-631-SA6-SB-0.0-0.5	22	SL-546-SA6-SB-6.5-7.5MSD	32	
3	SL-532-SA6-SB-0.0-0.5	13	SL-632-SA6-SB-0.0-0.5	23		33	
4	SL-533-SA6-SB-0.0-0.5	14	SL-629-SA6-SB-0.0-0.5	24		34	
5	SL-534-SA6-SB-0.0-0.5	15	SL-629-SA6-SB-2.5-3.5	25		35	
6	SL-534-SA6-SB-3.0-4.0	16	SL-630-SA6-SB-0.0-0.5	26		36	
7	SL-626-SA6-SB-0.0-0.5	17	SL-536-SA6-SB-0.0-0.5	27		37	
8	SL-627-SA6-SB-0.0-0.5	18	SL-546-SA6-SB-0.0-0.5	28		38	
9	SL-627-SA6-SB-1.0-2.0	19	SL-546-SA6-SB-6.5-7.5	29		39	
10	SL-628-SA6-SB-0.0-0.5	20	SL-549-SA6-SB-0.0-0.5	30		40	