

# Data Qualifier Summary

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-530-SA7-SB-0.0-0.5

Collected: 4/18/2013 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
1,2,3,6,7,8-HXCDD	0.462	J	0.0315	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.167	JBQ	0.0256	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.364	JB	0.0291	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0457	JB	0.0280	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.208	JB	0.0299	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.327	JBQ	0.0260	MDL	5.09	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.167	JBQ	0.0255	MDL	5.09	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.432	JB	0.0248	MDL	5.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.131	JQ	0.0512	MDL	1.02	PQL	ng/Kg	J	Z
OCDF	2.99	JB	0.0281	MDL	10.2	PQL	ng/Kg	J	Z

Sample ID: SL-531-SA7-SB-0.0-0.5

Collected: 4/18/2013 8:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.909	JB	0.0129	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0981	JBQ	0.0165	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.183	JB	0.0309	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.151	JBQ	0.0193	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.391	J	0.0307	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.117	JBQ	0.0183	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.482	JBQ	0.0284	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0578	JBQ	0.0208	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.173	JB	0.0225	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.175	JB	0.0173	MDL	5.01	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.124	JB	0.0183	MDL	5.01	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.272	JB	0.0162	MDL	5.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.136	J	0.0330	MDL	1.00	PQL	ng/Kg	J	Z
OCDF	1.92	JB	0.0201	MDL	10.0	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/1/2013 11:46:32 AM

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# Data Qualifier Summary

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-532-SA7-SB-0.0-0.5

Collected: 4/18/2013 9:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.58	JB	0.0188	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.513	JB	0.0104	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0834	JB	0.0148	MDL	4.95	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0857	JBQ	0.0230	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0810	JBQ	0.0194	MDL	4.95	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.134	J	0.0224	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0933	JBQ	0.0177	MDL	4.95	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.123	JB	0.0208	MDL	4.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0403	JBQ	0.0189	MDL	4.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0570	JBQ	0.0176	MDL	4.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.159	JB	0.0157	MDL	4.95	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0854	JBQ	0.0173	MDL	4.95	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.172	JB	0.0154	MDL	4.95	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0663	JQ	0.0278	MDL	0.991	PQL	ng/Kg	J	Z
OCDF	0.858	JB	0.0216	MDL	9.91	PQL	ng/Kg	J	Z

Sample ID: SL-533-SA7-SB-0.0-0.5

Collected: 4/18/2013 11:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.909	JB	0.0167	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.122	JBQ	0.0224	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.128	JB	0.0289	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.130	JB	0.0207	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.344	J	0.0290	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0771	JBQ	0.0193	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.298	JB	0.0276	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0392	JBQ	0.0233	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.107	JB	0.0221	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.158	JBQ	0.0188	MDL	5.19	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.128	JB	0.0203	MDL	5.19	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.224	JB	0.0182	MDL	5.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0326	JQ	0.0236	MDL	1.04	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method Category:</b>	<b>SVOA</b>		
<b>Method:</b>	<b>1613B</b>	<b>Matrix:</b>	<b>SO</b>

<b>Sample ID:</b> SL-533-SA7-SB-0.0-0.5		<b>Collected:</b> 4/18/2013 11:25:00		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1			
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.0789	JQ	0.0351	MDL	1.04	PQL	ng/Kg	J	Z
OCDF	2.02	JB	0.0237	MDL	10.4	PQL	ng/Kg	J	Z

<b>Method Category:</b>	<b>SVOA</b>		
<b>Method:</b>	<b>8015M</b>	<b>Matrix:</b>	<b>AQ</b>

<b>Sample ID:</b> EB-041813		<b>Collected:</b> 4/18/2013 3:00:00		<b>Analysis Type:</b> REA		<b>Dilution:</b> 1			
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.62	U	0.10	MDL	0.62	PQL	mg/L	UJ	L
EFH (C8-C11)	0.62	U	0.10	MDL	0.62	PQL	mg/L	UJ	L

<b>Method Category:</b>	<b>SVOA</b>		
<b>Method:</b>	<b>8015M</b>	<b>Matrix:</b>	<b>SO</b>

<b>Sample ID:</b> SL-530-SA7-SB-0.0-0.5		<b>Collected:</b> 4/18/2013 2:10:00		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1			
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	44		4.1	MDL	10	PQL	mg/Kg	J	L

<b>Sample ID:</b> SL-531-SA7-SB-0.0-0.5		<b>Collected:</b> 4/18/2013 8:55:00		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1			
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.9	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z
EFH (C30-C40)	84		4.1	MDL	10	PQL	mg/Kg	J	L

<b>Sample ID:</b> SL-532-SA7-SB-0.0-0.5		<b>Collected:</b> 4/18/2013 9:45:00		<b>Analysis Type:</b> RES		<b>Dilution:</b> 1			
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	40		4.1	MDL	10	PQL	mg/Kg	J	L

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8015M

Matrix: SO

Sample ID: SL-533-SA7-SB-0.0-0.5

Collected: 4/18/2013 11:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	26		4.1	MDL	10	PQL	mg/Kg	J	L

Method Category: SVOA

Method: 8270D SIM

Matrix: AQ

Sample ID: EB-041813

Collected: 4/18/2013 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	0.014	J	0.010	MDL	0.051	PQL	ug/L	J	Z
2-METHYLNAPHTHALENE	0.018	J	0.010	MDL	0.051	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.11	J	0.051	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.071	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.11	J	0.051	MDL	1.0	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-530-SA7-SB-0.0-0.5

Collected: 4/18/2013 2:10:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-531-SA7-SB-0.0-0.5

Collected: 4/18/2013 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	0.90	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.87	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.86	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-531-SA7-SB-0.0-0.5

Collected: 4/18/2013 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
FLUORANTHENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.86	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-532-SA7-SB-0.0-0.5

Collected: 4/18/2013 9:45:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.40	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.61	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.96	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.92	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.80	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-533-SA7-SB-0.0-0.5

Collected: 4/18/2013 11:25:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.86	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.82	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.5	J	6.2	MDL	19	PQL	ug/Kg	J	Z
Butylbenzylphthalate	12	J	6.2	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORENE	0.86	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.77	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.95	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Upper Estimation
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
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

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH034



# Method Blank Outlier Report

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method:</b> 1613B <b>Matrix:</b> AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1120B372247	4/23/2013 10:47:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.304 pg/L 0.268 pg/L 0.249 pg/L 0.209 pg/L 0.192 pg/L 0.143 pg/L 0.213 pg/L 0.478 pg/L 0.459 pg/L 0.148 pg/L 0.221 pg/L 0.400 pg/L 0.832 pg/L	EB-041813

The 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-041813(RES)	1,2,3,4,6,7,8-HPCDD	0.576 pg/L	0.576U pg/L
EB-041813(RES)	1,2,3,4,6,7,8-HPCDF	0.466 pg/L	0.466U pg/L
EB-041813(RES)	1,2,3,4,7,8,9-HPCDF	0.358 pg/L	0.358U pg/L
EB-041813(RES)	1,2,3,6,7,8-HXCDD	0.206 pg/L	0.206U pg/L
EB-041813(RES)	1,2,3,6,7,8-HXCDF	0.191 pg/L	0.191U pg/L
EB-041813(RES)	1,2,3,7,8,9-HXCDF	0.137 pg/L	0.137U pg/L
EB-041813(RES)	1,2,3,7,8-PECDD	0.420 pg/L	0.420U pg/L
EB-041813(RES)	1,2,3,7,8-PECDF	0.761 pg/L	0.761U pg/L
EB-041813(RES)	2,3,4,6,7,8-HXCDF	0.201 pg/L	0.201U pg/L
EB-041813(RES)	2,3,4,7,8-PECDF	0.194 pg/L	0.194U pg/L
EB-041813(RES)	OCDD	1.20 pg/L	1.20U pg/L
EB-041813(RES)	OCDF	1.24 pg/L	1.24U pg/L

**Method:** 1613B

**Matrix:** SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1140B372001	4/25/2013 8:01:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HXCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0680 ng/Kg 0.0378 ng/Kg 0.0182 ng/Kg 0.0132 ng/Kg 0.0510 ng/Kg 0.0214 ng/Kg 0.0184 ng/Kg 0.0300 ng/Kg 0.0221 ng/Kg 0.0555 ng/Kg 0.0286 ng/Kg 0.0295 ng/Kg 0.148 ng/Kg 0.0895 ng/Kg	SL-530-SA7-SB-0.0-0.5 SL-531-SA7-SB-0.0-0.5 SL-532-SA7-SB-0.0-0.5 SL-533-SA7-SB-0.0-0.5

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-530-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.220 ng/Kg	0.220U ng/Kg
SL-530-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0457 ng/Kg	0.0457U ng/Kg
SL-531-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-531-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0578 ng/Kg	0.0578U ng/Kg
SL-531-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.175 ng/Kg	0.175U ng/Kg
SL-531-SA7-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.124 ng/Kg	0.124U ng/Kg
SL-532-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0834 ng/Kg	0.0834U ng/Kg
SL-532-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0810 ng/Kg	0.0810U ng/Kg
SL-532-SA7-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0933 ng/Kg	0.0933U ng/Kg
SL-532-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0403 ng/Kg	0.0403U ng/Kg
SL-532-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0570 ng/Kg	0.0570U ng/Kg
SL-532-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.159 ng/Kg	0.159U ng/Kg
SL-532-SA7-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0854 ng/Kg	0.0854U ng/Kg
SL-533-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.130 ng/Kg	0.130U ng/Kg
SL-533-SA7-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0771 ng/Kg	0.0771U ng/Kg
SL-533-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0392 ng/Kg	0.0392U ng/Kg
SL-533-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.107 ng/Kg	0.107U ng/Kg
SL-533-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.158 ng/Kg	0.158U ng/Kg
SL-533-SA7-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.128 ng/Kg	0.128U ng/Kg

Method: 6010C

Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11435AB221838	4/26/2013 6:38:00 PM	COPPER	0.0024 mg/L	EB-041813

Method: 6010C

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11537AB221818	4/28/2013 6:18:00 PM	ALUMINUM BORON CALCIUM PHOSPHORUS TIN	10.3 mg/Kg 1.62 mg/Kg 25.6 mg/Kg 1.45 mg/Kg 1.45 mg/Kg	SL-530-SA7-SB-0.0-0.5 SL-531-SA7-SB-0.0-0.5 SL-532-SA7-SB-0.0-0.5 SL-533-SA7-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-530-SA7-SB-0.0-0.5(REA/TOT)	BORON	3.08 mg/Kg	3.08U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/1/2013 11:45:04 AM

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PrepPH034

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method:** 6010C

**Matrix:** SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
SL-530-SA7-SB-0.0-0.5(REA/TOT)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-531-SA7-SB-0.0-0.5(REA/TOT)	BORON	2.91 mg/Kg	2.91U mg/Kg
SL-531-SA7-SB-0.0-0.5(REA/TOT)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-532-SA7-SB-0.0-0.5(REA/TOT)	BORON	1.98 mg/Kg	1.98U mg/Kg
SL-532-SA7-SB-0.0-0.5(REA/TOT)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-533-SA7-SB-0.0-0.5(REA/TOT)	BORON	2.64 mg/Kg	2.64U mg/Kg
SL-533-SA7-SB-0.0-0.5(REA/TOT)	TIN	3.36 mg/Kg	3.36U mg/Kg

**Method:** 6020A

**Matrix:** SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11537AB220821A	4/29/2013 8:21:00 AM	STRONTIUM	0.179 mg/Kg	SL-530-SA7-SB-0.0-0.5 SL-531-SA7-SB-0.0-0.5 SL-532-SA7-SB-0.0-0.5 SL-533-SA7-SB-0.0-0.5

**Method:** 8270D SIM

**Matrix:** AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC11B262011	4/28/2013 8:11:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	0.054 ug/L	EB-041813

*The 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-041813(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.11 ug/L	1.0U ug/L



# Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-041813(RES/TOT)	4/18/2013 3:00:00 PM	MOLYBDENUM	0.0036 mg/L	SL-530-SA7-SB-0.0-0.5 SL-531-SA7-SB-0.0-0.5 SL-532-SA7-SB-0.0-0.5 SL-533-SA7-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-533-SA7-SB-0.0-0.5(REA/TOT)	MOLYBDENUM	0.423 mg/Kg	0.423U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

6/24/2013 10:11:28 AM

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# Field Blank Outlier Report

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

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

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-530-SA7-SB-0.0-0.5 SL-531-SA7-SB-0.0-0.5 SL-532-SA7-SB-0.0-0.5 SL-533-SA7-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-533-SA7-SB-0.0-0.5(REA/TOT)	MOLYBDENUM	0.423 mg/Kg	0.423U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

6/24/2013 10:11:22 AM

ADR version 1.7.0.207

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# Surrogate Outlier Report

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8082A

Matrix: AQ

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB-041813	TETRACHLORO-M-XYLENE	123	45.00-120.00	All Target Analytes	J (all detects)

Method: 8082A

Matrix: SO

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-533-SA7-SB-0.0 -0.5	TETRACHLORO-M-XYLENE	125	45.00-120.00	All Target Analytes	J(all detects)



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8270D SIM

Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P3WCLCSQ262038 P3WCLCSY262105 (EB-041813)	BENZO(A)PYRENE	177	177	72.00-120.00	-	BENZO(A)PYRENE	J (all detects)

Method: 8015M

Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31133AQ321247A P31133AY321308A (EB-041813)	EFH (C30-C40) EFH (C8-C11)	- 63	67 62	70.00-130.00 70.00-130.00	- -	EFH (C30-C40) EFH (C8-C11)	J(all detects) UJ(all non-detects)

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31149AQ320500A (SL-530-SA7-SB-0.0-0.5 SL-531-SA7-SB-0.0-0.5 SL-532-SA7-SB-0.0-0.5 SL-533-SA7-SB-0.0-0.5)	EFH (C30-C40)	55	-	65.00-128.00	-	EFH (C30-C40)	J(all detects) UJ(all non-detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-041813	1,2,3,4,6,7,8-HPCDD	JBQ	0.576	9.71	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.466	9.71	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.358	9.71	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JQ	0.235	9.71	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.206	9.71	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.191	9.71	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.137	9.71	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.420	9.71	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.761	9.71	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.201	9.71	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.194	9.71	PQL	pg/L	
	OCDD	JB	1.20	19.4	PQL	pg/L	
	OCDF	JBQ	1.24	19.4	PQL	pg/L	

Method: 6010C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-041813	MOLYBDENUM	J	0.0036	0.0200	PQL	mg/L	J (all detects)

Method: 6020A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-041813	STRONTIUM	J	0.00028	0.0020	PQL	mg/L	J (all detects)

Method: 8270D SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-041813	1-METHYLNAPHTHALENE	J	0.014	0.051	PQL	ug/L	J (all detects)
	2-METHYLNAPHTHALENE	J	0.018	0.051	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.11	1.0	PQL	ug/L	
	Diethylphthalate	J	0.071	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.11	1.0	PQL	ug/L	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-530-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.37	5.09	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.132	5.09	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.266	5.09	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.220	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.462	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.167	5.09	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.364	5.09	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0457	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.208	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.327	5.09	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.167	5.09	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.432	5.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.131	1.02	PQL	ng/Kg	
	OCDF	JB	2.99	10.2	PQL	ng/Kg	
SL-531-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.909	5.01	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0981	5.01	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.183	5.01	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.151	5.01	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.391	5.01	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.117	5.01	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.482	5.01	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0578	5.01	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.173	5.01	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.175	5.01	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.124	5.01	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.272	5.01	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.136	1.00	PQL	ng/Kg	
	OCDF	JB	1.92	10.0	PQL	ng/Kg	
SL-532-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.58	4.95	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.513	4.95	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0834	4.95	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0857	4.95	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0810	4.95	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.134	4.95	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0933	4.95	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.123	4.95	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0403	4.95	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0570	4.95	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.159	4.95	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0854	4.95	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.172	4.95	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0663	0.991	PQL	ng/Kg	
	OCDF	JB	0.858	9.91	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-533-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.909	5.19	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.122	5.19	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.128	5.19	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.130	5.19	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.344	5.19	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0771	5.19	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.298	5.19	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0392	5.19	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.107	5.19	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.158	5.19	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.128	5.19	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.224	5.19	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0326	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0789	1.04	PQL	ng/Kg	
	OCDF	JB	2.02	10.4	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-530-SA7-SB-0.0-0.5	BERYLLIUM	J	0.395	1.01	PQL	mg/Kg	J (all detects)
	BORON	J	3.08	10.1	PQL	mg/Kg	
	CADMIUM	J	0.194	1.01	PQL	mg/Kg	
	SODIUM	J	57.4	101	PQL	mg/Kg	
	TIN	J	2.98	10.1	PQL	mg/Kg	
	Zirconium	J	1.59	5.05	PQL	mg/Kg	
SL-531-SA7-SB-0.0-0.5	ARSENIC	J	3.82	3.97	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.463	0.993	PQL	mg/Kg	
	BORON	J	2.91	9.93	PQL	mg/Kg	
	CADMIUM	J	0.139	0.993	PQL	mg/Kg	
	SODIUM	J	56.5	99.3	PQL	mg/Kg	
	TIN	J	2.97	9.93	PQL	mg/Kg	
	Zirconium	J	1.97	4.96	PQL	mg/Kg	
SL-532-SA7-SB-0.0-0.5	ARSENIC	J	3.93	3.99	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.382	0.998	PQL	mg/Kg	
	BORON	J	1.98	9.98	PQL	mg/Kg	
	CADMIUM	J	0.106	0.998	PQL	mg/Kg	
	SODIUM	J	53.0	99.8	PQL	mg/Kg	
	TIN	J	3.04	9.98	PQL	mg/Kg	
	Zirconium	J	1.58	4.99	PQL	mg/Kg	
SL-533-SA7-SB-0.0-0.5	ANTIMONY	J	0.770	3.99	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.669	0.997	PQL	mg/Kg	
	BORON	J	2.64	9.97	PQL	mg/Kg	
	CADMIUM	J	0.0439	0.997	PQL	mg/Kg	
	MOLYBDENUM	J	0.423	1.99	PQL	mg/Kg	
	SODIUM	J	63.6	99.7	PQL	mg/Kg	
	TIN	J	3.36	9.97	PQL	mg/Kg	
	Zirconium	J	3.18	4.99	PQL	mg/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-530-SA7-SB-0.0-0.5	SILVER	J	0.0245	0.202	PQL	mg/Kg	J (all detects)
SL-531-SA7-SB-0.0-0.5	THALLIUM	J	0.198	0.199	PQL	mg/Kg	J (all detects)
SL-533-SA7-SB-0.0-0.5	SELENIUM	J	0.231	0.399	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0368	0.199	PQL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-530-SA7-SB-0.0-0.5	MERCURY	J	0.0151	0.0202	PQL	mg/Kg	J (all detects)
SL-531-SA7-SB-0.0-0.5	MERCURY	J	0.0171	0.0204	PQL	mg/Kg	J (all detects)
SL-532-SA7-SB-0.0-0.5	MERCURY	J	0.0144	0.0193	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-531-SA7-SB-0.0-0.5	EFH (C15-C20)	J	4.9	5.1	PQL	mg/Kg	J (all detects)

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-530-SA7-SB-0.0-0.5	BENZO(A)ANTHRACENE	J	1.4	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.5	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.7	PQL	ug/Kg	
SL-531-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.90	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.87	1.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.86	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.86	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.7	PQL	ug/Kg	
	PYRENE	J	1.4	1.7	PQL	ug/Kg	
SL-532-SA7-SB-0.0-0.5	ANTHRACENE	J	0.40	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.61	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.96	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.92	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.7	PQL	ug/Kg	
	PYRENE	J	0.80	1.7	PQL	ug/Kg	

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH034

Laboratory: LL

EDD Filename: PH034\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-533-SA7-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.86	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.0	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.82	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.5	19	PQL	ug/Kg	
	Butylbenzylphthalate	J	12	19	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.7	PQL	ug/Kg	
	FLUORENE	J	0.86	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.77	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.95	1.7	PQL	ug/Kg	
	PYRENE	J	1.5	1.7	PQL	ug/Kg	



LDC #: 29836H4

## VALIDATION COMPLETENESS WORKSHEET

Date: 6/11/13

SDG #: PH034

ADR

Page: 1 of 1

Laboratory: Eurofins Lancaster Laboratories

Reviewer: AL

2nd Reviewer: [Signature]

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: 4/18/13
II.	ICP/MS Tune	-	
III.	Calibration	-	
IV.	Blanks	See SW	
V.	ICP Interference Check Sample (ICS) Analysis	-	
VI.	Matrix Spike Analysis	N	See MS/D (from PH036)
VII.	Duplicate Sample Analysis	N	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	See SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	-	
XV.	Field Blanks	SW	GB=5 FB=FB-041113 (PH029)

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-531-SA7-SB-0.0-0.5	11		21		31	
2	SL-532-SA7-SB-0.0-0.5	12		22		32	
3	SL-533-SA7-SB-0.0-0.5	13		23		33	
4	SL-530-SA7-SB-0.0-0.5	14		24		34	
5	EB-041813	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 #: 29836H4

VALIDATION FINDINGS WORKSHEET  
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

Soil preparation factor applied: 100x Reason: B

Page: 1 of 1  
Reviewer: [Signature]  
2nd Reviewer: [Signature]

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

Analyte	Maximum PB* (mg/Kg)	Maximum PB* (ug/L)	Maximum ICB/CCB* (ug/L)	Action Level	5															
Mo				0.023	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.



# VALIDATION FINDINGS WORKSHEET

## Field Blanks

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

Blank units: mg/L Associated sample units: mg/Kg Reason: F  
 Sampling date: EB=4/18/13 FB=4/11/13 Soil factor applied 100x  
 Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

[illegible]

29836H4eb.wpd



## **Attachment I**

### **Sample ID Cross Reference and Data Review Level**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2013	SL-518-SA7-SB-0.0-0.5	7029644	N	3050B	6010C	III
19-Apr-2013	SL-518-SA7-SB-0.0-0.5	7029644	N	3050B	6020A	III
19-Apr-2013	SL-518-SA7-SB-0.0-0.5	7029644	N	3546	8015M	III
19-Apr-2013	SL-518-SA7-SB-0.0-0.5	7029644	N	3546	8082A	III
19-Apr-2013	SL-518-SA7-SB-0.0-0.5	7029644	N	3546	8270D SIM	III
19-Apr-2013	SL-518-SA7-SB-0.0-0.5	7029644	N	METHOD	1613B	III
19-Apr-2013	SL-518-SA7-SB-0.0-0.5	7029644	N	METHOD	7471B	III
19-Apr-2013	SL-520-SA7-SB-0.0-0.5	7029645	N	3050B	6010C	III
19-Apr-2013	SL-520-SA7-SB-0.0-0.5	7029645	N	3050B	6020A	III
19-Apr-2013	SL-520-SA7-SB-0.0-0.5	7029645	N	3546	8015M	III
19-Apr-2013	SL-520-SA7-SB-0.0-0.5	7029645	N	3546	8082A	III
19-Apr-2013	SL-520-SA7-SB-0.0-0.5	7029645	N	3546	8270D SIM	III
19-Apr-2013	SL-520-SA7-SB-0.0-0.5	7029645	N	METHOD	1613B	III
19-Apr-2013	SL-520-SA7-SB-0.0-0.5	7029645	N	METHOD	7471B	III
19-Apr-2013	SL-511-SA7-SB-0.0-0.5	7029646	N	3050B	6010C	III
19-Apr-2013	SL-511-SA7-SB-0.0-0.5	7029646	N	3050B	6020A	III
19-Apr-2013	SL-511-SA7-SB-0.0-0.5	7029646	N	3546	8015M	III
19-Apr-2013	SL-511-SA7-SB-0.0-0.5	7029646	N	3546	8081B	III
19-Apr-2013	SL-511-SA7-SB-0.0-0.5	7029646	N	3546	8082A	III
19-Apr-2013	SL-511-SA7-SB-0.0-0.5	7029646	N	3546	8270D SIM	III
19-Apr-2013	SL-511-SA7-SB-0.0-0.5	7029646	N	METHOD	1613B	III
19-Apr-2013	SL-511-SA7-SB-0.0-0.5	7029646	N	METHOD	7471B	III
19-Apr-2013	EB-041913	7029647	EB	3510C	8081B	III



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PrepPH035

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-511-SA7-SB-0.0-0.5

Collected: 4/19/2013 11:05:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.585	J	0.508	MDL	4.06	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.487	J	0.0680	MDL	1.02	PQL	mg/Kg	J	Z
BORON	4.33	J	0.843	MDL	10.2	PQL	mg/Kg	U	B
CADMIUM	0.336	J	0.0335	MDL	1.02	PQL	mg/Kg	J	Z
LEAD	15.0		0.477	MDL	3.05	PQL	mg/Kg	J	E, Q, E
MOLYBDENUM	0.429	J	0.173	MDL	2.03	PQL	mg/Kg	U	F, F
POTASSIUM	4240		13.7	MDL	102	PQL	mg/Kg	J	Q
SODIUM	67.7	J	17.0	MDL	102	PQL	mg/Kg	J	Z
TIN	3.20	J	0.223	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.17	J	0.843	MDL	5.08	PQL	mg/Kg	J	Z

Sample ID: SL-518-SA7-SB-0.0-0.5

Collected: 4/19/2013 8:50:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.777	J	0.497	MDL	3.98	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.544	J	0.0666	MDL	0.995	PQL	mg/Kg	J	Z
BORON	3.73	J	0.826	MDL	9.95	PQL	mg/Kg	U	B
CADMIUM	0.606	J	0.0328	MDL	0.995	PQL	mg/Kg	J	Z
LEAD	24.1		0.468	MDL	2.98	PQL	mg/Kg	J	E, Q, E
MOLYBDENUM	0.359	J	0.169	MDL	1.99	PQL	mg/Kg	U	F, F
POTASSIUM	4520		13.4	MDL	99.5	PQL	mg/Kg	J	Q
SODIUM	77.0	J	16.6	MDL	99.5	PQL	mg/Kg	J	Z
TIN	3.33	J	0.219	MDL	9.95	PQL	mg/Kg	U	B
Zirconium	2.82	J	0.826	MDL	4.97	PQL	mg/Kg	J	Z

Sample ID: SL-520-SA7-SB-0.0-0.5

Collected: 4/19/2013 9:50:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.00	U	0.500	MDL	4.00	PQL	mg/Kg	UJ	Q
BERYLLIUM	0.522	J	0.0670	MDL	1.00	PQL	mg/Kg	J	Z
BORON	4.32	J	0.830	MDL	10.0	PQL	mg/Kg	U	B
CADMIUM	0.128	J	0.0330	MDL	1.00	PQL	mg/Kg	J	Z
LEAD	13.5		0.470	MDL	3.00	PQL	mg/Kg	J	E, Q, E
MOLYBDENUM	0.297	J	0.170	MDL	2.00	PQL	mg/Kg	U	F, F
POTASSIUM	4220		13.5	MDL	100	PQL	mg/Kg	J	Q

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PrepPH035

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

**Sample ID:** SL-520-SA7-SB-0.0-0.5

**Collected:** 4/19/2013 9:50:00

**Analysis Type:** RES/TOT

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	63.2	J	16.7	MDL	100	PQL	mg/Kg	J	Z
TIN	3.13	J	0.220	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	2.43	J	0.830	MDL	5.00	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

**Sample ID:** SL-511-SA7-SB-0.0-0.5

**Collected:** 4/19/2013 11:05:00

**Analysis Type:** REA/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.102	MDL	0.406	PQL	mg/Kg	J	Z

**Sample ID:** SL-511-SA7-SB-0.0-0.5

**Collected:** 4/19/2013 11:05:00

**Analysis Type:** RES/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0715	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z
STRONTIUM	16.7		0.0345	MDL	0.406	PQL	mg/Kg	J	Q

**Sample ID:** SL-518-SA7-SB-0.0-0.5

**Collected:** 4/19/2013 8:50:00

**Analysis Type:** RES/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0918	J	0.0199	MDL	0.199	PQL	mg/Kg	J	Z
STRONTIUM	12.9		0.0338	MDL	0.398	PQL	mg/Kg	J	Q

**Sample ID:** SL-520-SA7-SB-0.0-0.5

**Collected:** 4/19/2013 9:50:00

**Analysis Type:** RES/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0306	J	0.0200	MDL	0.200	PQL	mg/Kg	J	Z
STRONTIUM	14.3		0.0340	MDL	0.400	PQL	mg/Kg	J	Q

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PrepPH035

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

**Sample ID:** SL-511-SA7-SB-0.0-0.5

**Collected:** 4/19/2013 11:05:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	3.99	JB	0.0556	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	4.09	JB	0.0449	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.86	JB	0.0465	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.89	JB	0.0422	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.94	JB	0.0624	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.52	JB	0.0390	MDL	5.18	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.35	JB	0.0407	MDL	5.18	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.77	JB	0.0387	MDL	5.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.279	J	0.0479	MDL	1.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.972	J	0.0855	MDL	1.04	PQL	ng/Kg	J	Z
OCDD	5740	BE	0.0722	MDL	10.4	PQL	ng/Kg	J	*XIII

**Sample ID:** SL-518-SA7-SB-0.0-0.5

**Collected:** 4/19/2013 8:50:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.36	JB	0.0354	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.39	JB	0.0356	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.24	JB	0.0369	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	4.08	J	0.0360	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.23	JB	0.0352	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	2.53	JB	0.0332	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.600	JBQ	0.0460	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	5.05	JB	0.0448	MDL	5.10	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.12	JB	0.0361	MDL	5.10	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.73	JB	0.0419	MDL	5.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.139	J	0.0266	MDL	1.02	PQL	ng/Kg	J	Z

**Sample ID:** SL-520-SA7-SB-0.0-0.5

**Collected:** 4/19/2013 9:50:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.42	JB	0.0219	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.219	JB	0.0319	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.209	JB	0.0295	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.327	JB	0.0268	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	0.770	J	0.0292	MDL	5.04	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PrepPH035

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-520-SA7-SB-0.0-0.5

Collected: 4/19/2013 9:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.270	JB	0.0242	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.479	JB	0.0261	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.174	JBQ	0.0272	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.693	JB	0.0229	MDL	5.04	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.234	JB	0.0237	MDL	5.04	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.497	JB	0.0226	MDL	5.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0444	JQ	0.0266	MDL	1.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.244	JQ	0.0435	MDL	1.01	PQL	ng/Kg	J	Z
OCDF	5.85	JB	0.0236	MDL	10.1	PQL	ng/Kg	J	Z

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-511-SA7-SB-0.0-0.5

Collected: 4/19/2013 11:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.5	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z
EFH (C30-C40)	66		4.2	MDL	10	PQL	mg/Kg	J	L

Sample ID: SL-518-SA7-SB-0.0-0.5

Collected: 4/19/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	35		4.1	MDL	10	PQL	mg/Kg	J	L

Sample ID: SL-520-SA7-SB-0.0-0.5

Collected: 4/19/2013 9:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	21		4.1	MDL	10	PQL	mg/Kg	J	L

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/1/2013 11:50:13 AM

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## Data Qualifier Summary

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PrepPH035

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-511-SA7-SB-0.0-0.5

Collected: 4/19/2013 11:05:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.18	J	0.18	MDL	0.87	PQL	ug/Kg	J	Z

**Method Category:** SVOA

**Method:** 8082A

**Matrix:** SO

Sample ID: SL-511-SA7-SB-0.0-0.5

Collected: 4/19/2013 11:05:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	13	J	4.6	MDL	18	PQL	ug/Kg	J	Z
AROCLOR 1260	7.8	J	4.1	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-518-SA7-SB-0.0-0.5

Collected: 4/19/2013 8:50:00

Analysis Type: RES

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	110	J	51	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-520-SA7-SB-0.0-0.5

Collected: 4/19/2013 9:50:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	5.0	J	3.9	MDL	17	PQL	ug/Kg	J	Z
Aroclor 5460	24	J	10	MDL	33	PQL	ug/Kg	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-511-SA7-SB-0.0-0.5

Collected: 4/19/2013 11:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.73	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(E)PYRENE	4.2	J	3.5	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
FLUORENE	0.98	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PrepPH035

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-518-SA7-SB-0.0-0.5

Collected: 4/19/2013 8:50:00

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(B)FLUORANTHENE	13	J	6.8	MDL	17	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	14	J	6.8	MDL	17	PQL	ug/Kg	J	Z
CHRYSENE	7.5	J	3.4	MDL	17	PQL	ug/Kg	J	Z
FLUORANTHENE	7.7	J	6.8	MDL	17	PQL	ug/Kg	J	Z
PYRENE	7.7	J	6.8	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-520-SA7-SB-0.0-0.5

Collected: 4/19/2013 9:50:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.1	MDL	18	PQL	ug/Kg	J	Z
Butylbenzylphthalate	14	J	6.1	MDL	18	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.86	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.69	J	0.68	MDL	1.7	PQL	ug/Kg	U	F
PHENANTHRENE	0.91	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PrepPH035

eQAPP Name: CDM\_SSFL\_130621\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
*XIII	Exceeded Calibration Range
A	Professional Judgment
B	Method Blank Contamination
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
L	Laboratory Control Spike Lower Estimation
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
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

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH035



# Method Blank Outlier Report

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PrepPH035

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method: 1613B</b> <b>Matrix: SO</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1140B372001	4/25/2013 8:01:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0680 ng/Kg 0.0378 ng/Kg 0.0182 ng/Kg 0.0132 ng/Kg 0.0510 ng/Kg 0.0214 ng/Kg 0.0184 ng/Kg 0.0300 ng/Kg 0.0221 ng/Kg 0.0555 ng/Kg 0.0286 ng/Kg 0.0295 ng/Kg 0.148 ng/Kg 0.085 ng/Kg	SL-511-SA7-SB-0.0-0.5 SL-518-SA7-SB-0.0-0.5 SL-520-SA7-SB-0.0-0.5

<b>Method: 6010C</b> <b>Matrix: SO</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11537AB221818	4/28/2013 6:18:00 PM	ALUMINUM BORON CALCIUM PHOSPHORUS TIN	10.3 mg/Kg 1.62 mg/Kg 25.6 mg/Kg 1.45 mg/Kg 1.45 mg/Kg	SL-511-SA7-SB-0.0-0.5 SL-518-SA7-SB-0.0-0.5 SL-520-SA7-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-511-SA7-SB-0.0-0.5(RES/TOT)	BORON	4.33 mg/Kg	4.33U mg/Kg
SL-511-SA7-SB-0.0-0.5(RES/TOT)	TIN	3.20 mg/Kg	3.20U mg/Kg
SL-518-SA7-SB-0.0-0.5(RES/TOT)	BORON	3.73 mg/Kg	3.73U mg/Kg
SL-518-SA7-SB-0.0-0.5(RES/TOT)	TIN	3.33 mg/Kg	3.33U mg/Kg
SL-520-SA7-SB-0.0-0.5(RES/TOT)	BORON	4.32 mg/Kg	4.32U mg/Kg
SL-520-SA7-SB-0.0-0.5(RES/TOT)	TIN	3.13 mg/Kg	3.13U mg/Kg

<b>Method: 6020A</b> <b>Matrix: SO</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11537AB220821A	4/29/2013 8:21:00 AM	STRONTIUM	0.179 mg/Kg	SL-511-SA7-SB-0.0-0.5 SL-518-SA7-SB-0.0-0.5 SL-520-SA7-SB-0.0-0.5

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/1/2013 11:51:38 AM

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# Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PH035\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-041813(RES)	4/18/2013 3:00:00 PM	MOLYBDENUM	0.0036 mg/L	SL-511-SA7-SB-0.0-0.5 SL-518-SA7-SB-0.0-0.5 SL-520-SA7-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-511-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.429 mg/Kg	0.429U mg/Kg
SL-518-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.359 mg/Kg	0.359U mg/Kg
SL-520-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.297 mg/Kg	0.297U mg/Kg

**Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7**

6/24/2013 11:07:19 AM

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# Field Blank Outlier Report

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PH035\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method:</b>	6010C
<b>Matrix:</b>	SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-511-SA7-SB-0.0-0.5 SL-518-SA7-SB-0.0-0.5 SL-520-SA7-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-511-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.429 mg/Kg	0.429U mg/Kg
SL-518-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.359 mg/Kg	0.359U mg/Kg
SL-520-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.297 mg/Kg	0.297U mg/Kg

<b>Method:</b>	8270D SIM
<b>Matrix:</b>	SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(RES)	4/11/2013 3:00:00 PM	1-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate NAPHTHALENE	0.019 ug/L 0.024 ug/L 0.082 ug/L 0.18 ug/L 0.17 ug/L 0.17 ug/L	SL-511-SA7-SB-0.0-0.5 SL-518-SA7-SB-0.0-0.5 SL-520-SA7-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-520-SA7-SB-0.0-0.5(RES)	NAPHTHALENE	0.69 ug/Kg	1.7U ug/Kg



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PH035\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31149AQ320500A (SL-511-SA7-SB-0.0-0.5 SL-518-SA7-SB-0.0-0.5 SL-520-SA7-SB-0.0-0.5)	EFH (C30-C40)	55	-	65.00-128.00	-	EFH (C30-C40)	J (all detects) UJ (all non-detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PH035\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	3.99	5.18	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	4.09	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	2.86	5.18	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	1.89	5.18	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.94	5.18	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.52	5.18	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	2.35	5.18	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.77	5.18	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.279	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.972	1.04	PQL	ng/Kg	
SL-518-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.36	5.10	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.39	5.10	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	2.24	5.10	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	4.08	5.10	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	1.23	5.10	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	2.53	5.10	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.600	5.10	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	5.05	5.10	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	1.12	5.10	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.73	5.10	PQL	ng/Kg	
SL-520-SA7-SB-0.0-0.5	2,3,7,8-TCDD	J	0.139	1.02	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	2.42	5.04	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.219	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.209	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.327	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.770	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.270	5.04	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.479	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.174	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.693	5.04	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.234	5.04	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.497	5.04	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0444	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.244	1.01	PQL	ng/Kg	
	OCDF	JB	5.85	10.1	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA7-SB-0.0-0.5	ANTIMONY	J	0.585	4.06	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.487	1.02	PQL	mg/Kg	
	BORON	J	4.33	10.2	PQL	mg/Kg	
	CADMIUM	J	0.336	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.429	2.03	PQL	mg/Kg	
	SODIUM	J	67.7	102	PQL	mg/Kg	
	TIN	J	3.20	10.2	PQL	mg/Kg	
	Zirconium	J	2.17	5.08	PQL	mg/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PH035\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method:** 6010C

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-518-SA7-SB-0.0-0.5	ANTIMONY	J	0.777	3.98	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.544	0.995	PQL	mg/Kg	
	BORON	J	3.73	9.95	PQL	mg/Kg	
	CADMIUM	J	0.606	0.995	PQL	mg/Kg	
	MOLYBDENUM	J	0.359	1.99	PQL	mg/Kg	
	SODIUM	J	77.0	99.5	PQL	mg/Kg	
	TIN	J	3.33	9.95	PQL	mg/Kg	
	Zirconium	J	2.82	4.97	PQL	mg/Kg	
SL-520-SA7-SB-0.0-0.5	BERYLLIUM	J	0.522	1.00	PQL	mg/Kg	J (all detects)
	BORON	J	4.32	10.0	PQL	mg/Kg	
	CADMIUM	J	0.128	1.00	PQL	mg/Kg	
	MOLYBDENUM	J	0.297	2.00	PQL	mg/Kg	
	SODIUM	J	63.2	100	PQL	mg/Kg	
	TIN	J	3.13	10.0	PQL	mg/Kg	
	Zirconium	J	2.43	5.00	PQL	mg/Kg	

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA7-SB-0.0-0.5	SELENIUM	J	0.129	0.406	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0715	0.203	PQL	mg/Kg	
SL-518-SA7-SB-0.0-0.5	SILVER	J	0.0918	0.199	PQL	mg/Kg	J (all detects)
SL-520-SA7-SB-0.0-0.5	SILVER	J	0.0306	0.200	PQL	mg/Kg	J (all detects)

**Method:** 8015M

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA7-SB-0.0-0.5	EFH (C15-C20)	J	3.5	5.2	PQL	mg/Kg	J (all detects)

**Method:** 8081B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA7-SB-0.0-0.5	HEPTACHLOR	J	0.18	0.87	PQL	ug/Kg	J (all detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH035

Laboratory: LL

EDD Filename: PH035\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8082A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA7-SB-0.0-0.5	AROCLOR 1254	J	13	18	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	7.8	18	PQL	ug/Kg	
SL-518-SA7-SB-0.0-0.5	Aroclor 5460	J	110	170	PQL	ug/Kg	J (all detects)
SL-520-SA7-SB-0.0-0.5	AROCLOR 1260	J	5.0	17	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	24	33	PQL	ug/Kg	

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.6	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.73	1.7	PQL	ug/Kg	
	BENZO(E)PYRENE	J	4.2	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	FLUORENE	J	0.98	1.7	PQL	ug/Kg	
SL-518-SA7-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	13	17	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	14	17	PQL	ug/Kg	
	CHRYSENE	J	7.5	17	PQL	ug/Kg	
	FLUORANTHENE	J	7.7	17	PQL	ug/Kg	
	PYRENE	J	7.7	17	PQL	ug/Kg	
SL-520-SA7-SB-0.0-0.5	BENZO(A)PYRENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.1	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	18	PQL	ug/Kg	
	Butylbenzylphthalate	J	14	18	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.86	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.69	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.91	1.7	PQL	ug/Kg	
	PYRENE	J	1.6	1.7	PQL	ug/Kg	



LDC #: 2983614

SDG #: PH035

Laboratory: Eurofins Lancaster Laboratories

## VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 6/11/13

Page: 1 of 1

Reviewer: OL

2nd Reviewer: V

**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: 4/19/13
II.	ICP/MS Tune	-	
III.	Calibration	-	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	-	
VI.	Matrix Spike Analysis	N	ESR MS/D (from PH036)
VII.	Duplicate Sample Analysis	N	\$ Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	NA	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	-	
XV.	Field Blanks	SW	FB= FB-041113 (PH029) EB= EB-041813 (PH034)

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-518-SA7-SB-0.0-0.5	11		21		31	
2	SL-520-SA7-SB-0.0-0.5	12		22		32	
3	SL-511-SA7-SB-0.0-0.5	13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_



VALIDATION FINDINGS WORKSHEET  
Field BlanksPage: 1 of 1  
Reviewer: AL  
2nd Reviewer: AL

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

Blank units: mg/L Associated sample units: mg/Kg Reason: F  
Sampling date: EB=4/18/13 FB=4/11/13 Soil factor applied 100x  
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Blank ID	Sample Identification				
	EB-041813	FB-041113	Action Limit	1	2	3	
Cu		0.0036	1.8				
Mo	0.0036	0.0036	1.8	0.36	0.30	0.43	
Sr	0.000028		0.014				

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



## **Attachment I**

### **Sample ID Cross Reference and Data Review Level**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2013	TB-042213	7031221	TB	5030B	8015M	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5	7031213	N	3050B	6010C	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5	7031213	N	3050B	6020A	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5	7031213	N	3546	8015M	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5	7031213	N	3546	8081B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5	7031213	N	3546	8082A	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5	7031213	N	3546	8270D SIM	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5	7031213	N	METHOD	1613B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5	7031213	N	METHOD	7471B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MS	7031214	MS	3050B	6010C	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MS	7031214	MS	3050B	6020A	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MS	7031214	MS	3546	8015M	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MS	7031214	MS	3546	8081B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MS	7031214	MS	3546	8082A	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MS	7031214	MS	3546	8270D SIM	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MS	7031214	MS	METHOD	1613B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MS	7031214	MS	METHOD	7471B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MSD	7031215	MSD	3050B	6010C	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MSD	7031215	MSD	3050B	6020A	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MSD	7031215	MSD	3546	8015M	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MSD	7031215	MSD	3546	8081B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MSD	7031215	MSD	3546	8082A	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MSD	7031215	MSD	3546	8270D SIM	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MSD	7031215	MSD	METHOD	1613B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5MSD	7031215	MSD	METHOD	7471B	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5DUP	7031216	DUP	3050B	6010C	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2013	SL-510-SA7-SB-0.0-0.5DUP	7031216	DUP	3050B	6020A	III
22-Apr-2013	SL-510-SA7-SB-0.0-0.5DUP	7031216	DUP	METHOD	7471B	III
22-Apr-2013	SL-810-SA7-SB-0.0-0.5	7031217	FD	3050B	6010C	III
22-Apr-2013	SL-810-SA7-SB-0.0-0.5	7031217	FD	3050B	6020A	III
22-Apr-2013	SL-810-SA7-SB-0.0-0.5	7031217	FD	3546	8015M	III
22-Apr-2013	SL-810-SA7-SB-0.0-0.5	7031217	FD	3546	8081B	III
22-Apr-2013	SL-810-SA7-SB-0.0-0.5	7031217	FD	3546	8082A	III
22-Apr-2013	SL-810-SA7-SB-0.0-0.5	7031217	FD	3546	8270D SIM	III
22-Apr-2013	SL-810-SA7-SB-0.0-0.5	7031217	FD	METHOD	1613B	III
22-Apr-2013	SL-810-SA7-SB-0.0-0.5	7031217	FD	METHOD	7471B	III
22-Apr-2013	SL-503-SA7-SB-0.0-0.5	7031218	N	3050B	6010C	III
22-Apr-2013	SL-503-SA7-SB-0.0-0.5	7031218	N	3050B	6020A	III
22-Apr-2013	SL-503-SA7-SB-0.0-0.5	7031218	N	3546	8015M	III
22-Apr-2013	SL-503-SA7-SB-0.0-0.5	7031218	N	3546	8081B	III
22-Apr-2013	SL-503-SA7-SB-0.0-0.5	7031218	N	3546	8082A	III
22-Apr-2013	SL-503-SA7-SB-0.0-0.5	7031218	N	3546	8270D SIM	III
22-Apr-2013	SL-503-SA7-SB-0.0-0.5	7031218	N	METHOD	1613B	III
22-Apr-2013	SL-503-SA7-SB-0.0-0.5	7031218	N	METHOD	7471B	III
22-Apr-2013	SL-504-SA7-SB-0.0-0.5	7031219	N	3050B	6010C	III
22-Apr-2013	SL-504-SA7-SB-0.0-0.5	7031219	N	3050B	6020A	III
22-Apr-2013	SL-504-SA7-SB-0.0-0.5	7031219	N	3546	8015M	III
22-Apr-2013	SL-504-SA7-SB-0.0-0.5	7031219	N	3546	8081B	III
22-Apr-2013	SL-504-SA7-SB-0.0-0.5	7031219	N	3546	8082A	III
22-Apr-2013	SL-504-SA7-SB-0.0-0.5	7031219	N	3546	8270D SIM	III
22-Apr-2013	SL-504-SA7-SB-0.0-0.5	7031219	N	METHOD	1613B	III
22-Apr-2013	SL-504-SA7-SB-0.0-0.5	7031219	N	METHOD	7471B	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	3050B	6010C	III
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	3050B	6020A	III
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	3546	8015M	III
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	3546	8081B	III
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	3546	8082A	III
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	3546	8270D SIM	III
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	5035A	8015M	III
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	METHOD	1613B	III
22-Apr-2013	SL-504-SA7-SB-4.0-5.0	7031220	N	METHOD	7471B	III
22-Apr-2013	SL-517-SA7-SB-0.0-0.5	7031222	N	3050B	6010C	III
22-Apr-2013	SL-517-SA7-SB-0.0-0.5	7031222	N	3050B	6020A	III
22-Apr-2013	SL-517-SA7-SB-0.0-0.5	7031222	N	3546	8015M	III
22-Apr-2013	SL-517-SA7-SB-0.0-0.5	7031222	N	3546	8082A	III
22-Apr-2013	SL-517-SA7-SB-0.0-0.5	7031222	N	3546	8270D SIM	III
22-Apr-2013	SL-517-SA7-SB-0.0-0.5	7031222	N	METHOD	1613B	III
22-Apr-2013	SL-517-SA7-SB-0.0-0.5	7031222	N	METHOD	7471B	III



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-503-SA7-SB-0.0-0.5

Collected: 4/22/2013 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
ANTIMONY	4.05	U	0.507	MDL	4.05	PQL	mg/Kg	UJ	Q
BERYLLIUM	0.454	J	0.0679	MDL	1.01	PQL	mg/Kg	J	Z
BORON	6.61	J	0.841	MDL	10.1	PQL	mg/Kg	U	B, F
CADMIUM	0.462	J	0.0334	MDL	1.01	PQL	mg/Kg	J	Z
LEAD	23.7		0.476	MDL	3.04	PQL	mg/Kg	J	Q, E, E
MOLYBDENUM	0.331	J	0.172	MDL	2.03	PQL	mg/Kg	U	F
POTASSIUM	3420		13.7	MDL	101	PQL	mg/Kg	J	Q
SODIUM	70.3	J	16.9	MDL	101	PQL	mg/Kg	U	F
TIN	2.92	J	0.223	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.45	J	0.841	MDL	5.07	PQL	mg/Kg	J	Z

Sample ID: SL-504-SA7-SB-0.0-0.5

Collected: 4/22/2013 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
ANTIMONY	0.866	J	0.496	MDL	3.97	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.515	J	0.0664	MDL	0.991	PQL	mg/Kg	J	Z
BORON	2.39	J	0.823	MDL	9.91	PQL	mg/Kg	U	B, F
CADMIUM	0.239	J	0.0327	MDL	0.991	PQL	mg/Kg	J	Z
LEAD	11.3		0.466	MDL	2.97	PQL	mg/Kg	J	Q, E, E
MOLYBDENUM	0.279	J	0.169	MDL	1.98	PQL	mg/Kg	U	F
POTASSIUM	3580		13.4	MDL	99.1	PQL	mg/Kg	J	Q
SODIUM	107		16.6	MDL	99.1	PQL	mg/Kg	U	F
TIN	3.18	J	0.218	MDL	9.91	PQL	mg/Kg	U	B
Zirconium	2.35	J	0.823	MDL	4.96	PQL	mg/Kg	J	Z

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.826	J	0.519	MDL	4.15	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.657	J	0.0695	MDL	1.04	PQL	mg/Kg	J	Z
BORON	1.56	J	0.861	MDL	10.4	PQL	mg/Kg	U	B, F
CADMIUM	0.0757	J	0.0342	MDL	1.04	PQL	mg/Kg	J	Z
LEAD	7.48		0.488	MDL	3.11	PQL	mg/Kg	J	Q, E, E
MOLYBDENUM	0.289	J	0.176	MDL	2.07	PQL	mg/Kg	U	F
POTASSIUM	3060		14.0	MDL	104	PQL	mg/Kg	J	Q

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/1/2013 1:13:53 PM

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	98.1	J	17.3	MDL	104	PQL	mg/Kg	U	F
TIN	3.42	J	0.228	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.53	J	0.861	MDL	5.19	PQL	mg/Kg	J	Z

Sample ID: SL-510-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.11	U	0.514	MDL	4.11	PQL	mg/Kg	UJ	Q, FD
BERYLLIUM	0.542	J	0.0689	MDL	1.03	PQL	mg/Kg	J	Z
BORON	5.94	J	0.853	MDL	10.3	PQL	mg/Kg	UJ	B, FD, F
CADMIUM	0.120	J	0.0339	MDL	1.03	PQL	mg/Kg	J	Z
LEAD	29.2		0.483	MDL	3.08	PQL	mg/Kg	J	Q, E, E, FD
MOLYBDENUM	0.302	J	0.175	MDL	2.06	PQL	mg/Kg	U	F
POTASSIUM	3480		13.9	MDL	103	PQL	mg/Kg	J	Q
SODIUM	75.9	J	17.2	MDL	103	PQL	mg/Kg	U	F
TIN	3.14	J	0.226	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.52	J	0.853	MDL	5.14	PQL	mg/Kg	J	Z

Sample ID: SL-517-SA7-SB-0.0-0.5

Collected: 4/22/2013 2:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.06	J	0.506	MDL	4.05	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.510	J	0.0678	MDL	1.01	PQL	mg/Kg	J	Z
BORON	3.35	J	0.839	MDL	10.1	PQL	mg/Kg	U	B, F
CADMIUM	0.399	J	0.0334	MDL	1.01	PQL	mg/Kg	J	Z
LEAD	17.5		0.475	MDL	3.03	PQL	mg/Kg	J	Q, E, E
MOLYBDENUM	0.345	J	0.172	MDL	2.02	PQL	mg/Kg	U	F
POTASSIUM	3300		13.7	MDL	101	PQL	mg/Kg	J	Q
SODIUM	86.4	J	16.9	MDL	101	PQL	mg/Kg	U	F
TIN	3.19	J	0.222	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.940	J	0.510	MDL	4.08	PQL	mg/Kg	J	Z, Q, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.589	J	0.0684	MDL	1.02	PQL	mg/Kg	J	Z
BORON	2.59	J	0.847	MDL	10.2	PQL	mg/Kg	UJ	B, FD, F
CADMIUM	0.0868	J	0.0337	MDL	1.02	PQL	mg/Kg	J	Z
LEAD	81.7		0.480	MDL	3.06	PQL	mg/Kg	J	Q, E, E, FD
MOLYBDENUM	0.290	J	0.174	MDL	2.04	PQL	mg/Kg	U	F
POTASSIUM	4010		13.8	MDL	102	PQL	mg/Kg	J	Q
SODIUM	73.3	J	17.0	MDL	102	PQL	mg/Kg	U	F
TIN	3.05	J	0.225	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.72	J	0.847	MDL	5.10	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A

Matrix: SO

Sample ID: SL-503-SA7-SB-0.0-0.5

Collected: 4/22/2013 10:45:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.101	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: SL-503-SA7-SB-0.0-0.5

Collected: 4/22/2013 10:45:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0521	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z
STRONTIUM	37.0		0.0345	MDL	0.405	PQL	mg/Kg	J	Q

Sample ID: SL-504-SA7-SB-0.0-0.5

Collected: 4/22/2013 12:50:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0222	J	0.0198	MDL	0.198	PQL	mg/Kg	J	Z
STRONTIUM	15.8		0.0337	MDL	0.397	PQL	mg/Kg	J	Q

Sample ID: SL-504-SA7-SB-4.0-0.5

Collected: 4/22/2013 1:55:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0686	J	0.0207	MDL	0.207	PQL	mg/Kg	J	Z
STRONTIUM	16.3		0.0353	MDL	0.415	PQL	mg/Kg	J	Q

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/1/2013 1:13:53 PM

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6020A

Matrix: SO

Sample ID: SL-510-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:45:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.411	U	0.103	MDL	0.411	PQL	mg/Kg	UJ	FD

Sample ID: SL-510-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:45:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0279	J	0.0206	MDL	0.206	PQL	mg/Kg	J	Z
STRONTIUM	13.2		0.0350	MDL	0.411	PQL	mg/Kg	J	Q

Sample ID: SL-517-SA7-SB-0.0-0.5

Collected: 4/22/2013 2:50:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0593	J	0.0202	MDL	0.202	PQL	mg/Kg	J	Z
STRONTIUM	16.7		0.0344	MDL	0.405	PQL	mg/Kg	J	Q

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.102	MDL	0.408	PQL	mg/Kg	J	Z, FD

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0404	J	0.0204	MDL	0.204	PQL	mg/Kg	J	Z
STRONTIUM	11.4		0.0347	MDL	0.408	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7471B

Matrix: SO

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0170	J	0.0108	MDL	0.0175	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-503-SA7-SB-0.0-0.5

Collected: 4/22/2013 10:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.35	JB	0.0240	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.247	JB	0.0357	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.442	J	0.0245	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.420	JB	0.0228	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	1.09	JQ	0.0246	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.402	JB	0.0212	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	1.00	JB	0.0232	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.141	JB	0.0241	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.335	J	0.0396	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.856	JB	0.0213	MDL	4.99	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.309	JB	0.0220	MDL	4.99	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.547	JB	0.0206	MDL	4.99	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0642	JQ	0.0291	MDL	0.998	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.815	J	0.0465	MDL	0.998	PQL	ng/Kg	J	Z
OCDF	4.30	JB	0.0227	MDL	9.98	PQL	ng/Kg	J	Z

Sample ID: SL-504-SA7-SB-0.0-0.5

Collected: 4/22/2013 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
1,2,3,4,7,8,9-HPCDF	2.32	JB	0.0471	MDL	5.13	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.10	J	0.0381	MDL	5.13	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.49	JB	0.0398	MDL	5.13	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.22	JB	0.0383	MDL	5.13	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.13	J	0.0473	MDL	5.13	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.35	JB	0.0266	MDL	5.13	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.70	JB	0.0373	MDL	5.13	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.950	JB	0.0248	MDL	5.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0782	J	0.0251	MDL	1.03	PQL	ng/Kg	J	Z

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.96	JB	0.0236	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.313	JBQ	0.0322	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.329	JQ	0.0280	MDL	5.20	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.235	JBQ	0.0240	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.835	J	0.0286	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.206	JBQ	0.0232	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.755	JB	0.0275	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.181	JB	0.0246	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.163	J	0.0254	MDL	5.20	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.203	JBQ	0.0152	MDL	5.20	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.255	JBQ	0.0227	MDL	5.20	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.187	JB	0.0145	MDL	5.20	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.133	J	0.0306	MDL	1.04	PQL	ng/Kg	J	Z

Sample ID: SL-510-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.70	JB	0.0174	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.416	JB	0.0267	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.317	J	0.0266	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.97	JB	0.0228	MDL	5.00	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.925	J	0.0266	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.497	JB	0.0210	MDL	5.00	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.703	JB	0.0260	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.175	JBQ	0.0249	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.203	J	0.0248	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.591	JB	0.0160	MDL	5.00	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.478	JB	0.0225	MDL	5.00	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.824	JB	0.0159	MDL	5.00	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.258	J	0.0331	MDL	0.999	PQL	ng/Kg	J	Z
OCDD	177	B	0.0224	MDL	9.99	PQL	ng/Kg	J	Q, Q

Sample ID: SL-517-SA7-SB-0.0-0.5

Collected: 4/22/2013 2:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.86	JB	0.0435	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.84	J	0.0378	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.90	JB	0.0455	MDL	5.08	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-517-SA7-SB-0.0-0.5

Collected: 4/22/2013 2:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	4.56	JB	0.0434	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.72	JB	0.0388	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.758	JQ	0.0555	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.02	JB	0.0439	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.93	JB	0.0331	MDL	5.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.126	J	0.0248	MDL	1.02	PQL	ng/Kg	J	Z

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.40	JB	0.0240	MDL	4.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.396	JB	0.0369	MDL	4.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.357	JQ	0.0388	MDL	4.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.435	JB	0.0270	MDL	4.97	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDD	0.790	J	0.0407	MDL	4.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.267	JB	0.0249	MDL	4.97	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.622	JB	0.0375	MDL	4.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.111	JB	0.0300	MDL	4.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.135	JQ	0.0284	MDL	4.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.591	JB	0.0200	MDL	4.97	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.315	JB	0.0270	MDL	4.97	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.375	JB	0.0194	MDL	4.97	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.249	JQ	0.0395	MDL	0.994	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M

Matrix: SO

Sample ID: SL-503-SA7-SB-0.0-0.5

Collected: 4/22/2013 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 (C15-C20)	2.3	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z
EFH (C30-C40)	48		4.1	MDL	10	PQL	mg/Kg	J	L

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8015M

Matrix: SO

Sample ID: SL-504-SA7-SB-0.0-0.5

Collected: 4/22/2013 12:50:00

Analysis Type: RES

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	230		21	MDL	52	PQL	mg/Kg	J	L

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.7	J	2.1	MDL	5.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	77		4.2	MDL	11	PQL	mg/Kg	J	L

Sample ID: SL-510-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	6.9		2.1	MDL	5.2	PQL	mg/Kg	J	Q, FD
EFH (C30-C40)	21		4.2	MDL	10	PQL	mg/Kg	J	L, FD

Sample ID: SL-517-SA7-SB-0.0-0.5

Collected: 4/22/2013 2:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	29		4.1	MDL	10	PQL	mg/Kg	J	L

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	13		2.1	MDL	5.2	PQL	mg/Kg	J	FD
EFH (C30-C40)	39		4.1	MDL	10	PQL	mg/Kg	J	L, FD

Method Category: SVOA

Method: 8081B

Matrix: SO

Sample ID: SL-503-SA7-SB-0.0-0.5

Collected: 4/22/2013 10:45:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.83	J	0.36	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8081B

Matrix: SO

Sample ID: SL-510-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:45:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.67	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, FD
4,4'-DDT	0.72	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.4	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, FD
4,4'-DDT	1.8	U	0.59	MDL	1.8	PQL	ug/Kg	UJ	FD

Method Category: SVOA

Method: 8082A

Matrix: SO

Sample ID: SL-503-SA7-SB-0.0-0.5

Collected: 4/22/2013 10:45:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	11	J	4.5	MDL	17	PQL	ug/Kg	J	Z, S
Aroclor 5460	16	J	10	MDL	34	PQL	ug/Kg	J	Z, S

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	8.3	J	4.6	MDL	18	PQL	ug/Kg	J	Z, S
Aroclor 5460	13	J	10	MDL	35	PQL	ug/Kg	J	Z, S

Sample ID: SL-510-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:45:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	14	J	4.6	MDL	18	PQL	ug/Kg	J	Z, FD
Aroclor 5460	17	J	10	MDL	34	PQL	ug/Kg	J	Z, FD

Sample ID: SL-517-SA7-SB-0.0-0.5

Collected: 4/22/2013 2:50:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	280		20	MDL	87	PQL	ug/Kg	J	S
Aroclor 5460	250		51	MDL	170	PQL	ug/Kg	J	S

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8082A

Matrix: SO

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	25		4.5	MDL	17	PQL	ug/Kg	J	S, FD
Aroclor 5460	32	J	10	MDL	34	PQL	ug/Kg	J	Z, S, FD

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-503-SA7-SB-0.0-0.5

Collected: 4/22/2013 10:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.45	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.92	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.4	J	6.1	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.77	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-504-SA7-SB-0.0-0.5

Collected: 4/22/2013 12:50:00

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(B)FLUORANTHENE	8.7	J	6.9	MDL	17	PQL	ug/Kg	J	Z
CHRYSENE	8.2	J	3.4	MDL	17	PQL	ug/Kg	J	Z
FLUORANTHENE	10	J	6.9	MDL	17	PQL	ug/Kg	J	Z
PYRENE	8.7	J	6.9	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.85	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.74	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.6	J	6.3	MDL	19	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	0.86	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.84	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-504-SA7-SB-4.0-5.0

Collected: 4/22/2013 1:55:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-510-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:45:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.8		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	5.0		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	7.3	J	6.2	MDL	19	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	4.1		0.69	MDL	1.7	PQL	ug/Kg	J	FD
FLUORENE	1.7	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	2.0		0.69	MDL	1.7	PQL	ug/Kg	J	FD
NAPHTHALENE	0.93	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	3.4		0.69	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SL-517-SA7-SB-0.0-0.5

Collected: 4/22/2013 2:50:00

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	13	J	6.8	MDL	17	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	14	J	6.8	MDL	17	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	8.6	J	6.8	MDL	17	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	150	J	61	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	9.1	J	3.4	MDL	17	PQL	ug/Kg	J	Z
FLUORANTHENE	11	J	6.8	MDL	17	PQL	ug/Kg	J	Z
NAPHTHALENE	8.6	J	6.8	MDL	17	PQL	ug/Kg	J	Z
PHENANTHRENE	14	J	6.8	MDL	17	PQL	ug/Kg	J	Z
PYRENE	10	J	6.8	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.74	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.0	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	2.4		0.69	MDL	1.7	PQL	ug/Kg	J	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-810-SA7-SB-0.0-0.5

Collected: 4/22/2013 8:50:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.83	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	76		6.2	MDL	19	PQL	ug/Kg	J	FD
FLUORANTHENE	2.1		0.69	MDL	1.7	PQL	ug/Kg	J	FD
FLUORENE	0.69	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	0.69	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.8		0.69	MDL	1.7	PQL	ug/Kg	J	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
B	Method Blank Contamination
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
L	Laboratory Control Spike Lower Estimation
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
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

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH036



# Method Blank Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method: 1613B</b> <b>Matrix: SO</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1200B371904	5/1/2013 7:04:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8-HPCDF 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0731 ng/Kg 0.0401 ng/Kg 0.0269 ng/Kg 0.0375 ng/Kg 0.0203 ng/Kg 0.0225 ng/Kg 0.0140 ng/Kg 0.0365 ng/Kg 0.0283 ng/Kg 0.0100 ng/Kg 0.155 ng/Kg 0.107 ng/Kg	SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-SB-0.0-0.5

<b>Method: 6010C</b> <b>Matrix: SO</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11537AB221818	4/28/2013 6:18:00 PM	ALUMINUM BORON CALCIUM PHOSPHORUS TIN	10.3 mg/Kg 1.62 mg/Kg 25.6 mg/Kg 1.45 mg/Kg 1.45 mg/Kg	SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-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-503-SA7-SB-0.0-0.5(RES)	BORON	6.61 mg/Kg	6.61U mg/Kg
SL-503-SA7-SB-0.0-0.5(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-504-SA7-SB-0.0-0.5(RES)	BORON	2.39 mg/Kg	2.39U mg/Kg
SL-504-SA7-SB-0.0-0.5(RES)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-504-SA7-SB-4.0-5.0(RES)	BORON	1.56 mg/Kg	1.56U mg/Kg
SL-504-SA7-SB-4.0-5.0(RES)	TIN	3.42 mg/Kg	3.42U mg/Kg
SL-510-SA7-SB-0.0-0.5(RES)	BORON	5.94 mg/Kg	5.94U mg/Kg
SL-510-SA7-SB-0.0-0.5(RES)	TIN	3.14 mg/Kg	3.14U mg/Kg
SL-517-SA7-SB-0.0-0.5(RES)	BORON	3.35 mg/Kg	3.35U mg/Kg
SL-517-SA7-SB-0.0-0.5(RES)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-810-SA7-SB-0.0-0.5(RES)	BORON	2.59 mg/Kg	2.59U mg/Kg
SL-810-SA7-SB-0.0-0.5(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method:</b> 6020A				
<b>Matrix:</b> SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11537AB220821A	4/29/2013 8:21:00 AM	STRONTIUM	0.179 mg/Kg	SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-SB-0.0-0.5



# Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C  
Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-042413(RES)	4/24/2013 3:00:00 PM	BORON SODIUM TIN	0.0319 mg/L 0.228 mg/L 0.0035 mg/L	SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-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-503-SA7-SB-0.0-0.5(RES)	BORON	6.61 mg/Kg	6.61U mg/Kg
SL-503-SA7-SB-0.0-0.5(RES)	SODIUM	70.3 mg/Kg	70.3U mg/Kg
SL-504-SA7-SB-0.0-0.5(RES)	BORON	2.39 mg/Kg	2.39U mg/Kg
SL-504-SA7-SB-0.0-0.5(RES)	SODIUM	107 mg/Kg	107U mg/Kg
SL-504-SA7-SB-4.0-5.0(RES)	BORON	1.56 mg/Kg	1.56U mg/Kg
SL-504-SA7-SB-4.0-5.0(RES)	SODIUM	98.1 mg/Kg	98.1U mg/Kg
SL-510-SA7-SB-0.0-0.5(RES)	BORON	5.94 mg/Kg	5.94U mg/Kg
SL-510-SA7-SB-0.0-0.5(RES)	SODIUM	75.9 mg/Kg	75.9U mg/Kg
SL-517-SA7-SB-0.0-0.5(RES)	BORON	3.35 mg/Kg	3.35U mg/Kg
SL-517-SA7-SB-0.0-0.5(RES)	SODIUM	86.4 mg/Kg	86.4U mg/Kg
SL-810-SA7-SB-0.0-0.5(RES)	BORON	2.59 mg/Kg	2.59U mg/Kg
SL-810-SA7-SB-0.0-0.5(RES)	SODIUM	73.3 mg/Kg	73.3U mg/Kg



# Field Blank Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PrepPH036

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method:</b> 6010C				
<b>Matrix:</b> SO				
Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-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-503-SA7-SB-0.0-0.5(RES)	MOLYBDENUM	0.331 mg/Kg	0.331U mg/Kg
SL-504-SA7-SB-0.0-0.5(RES)	MOLYBDENUM	0.279 mg/Kg	0.279U mg/Kg
SL-504-SA7-SB-4.0-5.0(RES)	MOLYBDENUM	0.289 mg/Kg	0.289U mg/Kg
SL-510-SA7-SB-0.0-0.5(RES)	MOLYBDENUM	0.302 mg/Kg	0.302U mg/Kg
SL-517-SA7-SB-0.0-0.5(RES)	MOLYBDENUM	0.345 mg/Kg	0.345U mg/Kg
SL-810-SA7-SB-0.0-0.5(RES)	MOLYBDENUM	0.290 mg/Kg	0.290U mg/Kg



# Surrogate Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8082A

Matrix: SO

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
SL-503-SA7-SB-0.0 -0.5	TETRACHLORO-M-XYLENE	129	45.00-120.00	All Target Analytes	J (all detects)
SL-504-SA7-SB-4.0 -5.0	TETRACHLORO-M-XYLENE	127	45.00-120.00	All Target Analytes	J(all detects)
SL-517-SA7-SB-0.0 -0.5	DECACHLOROBIPHENYL	132	45.00-120.00	All Target Analytes	J(all detects)
	TETRACHLORO-M-XYLENE	123	45.00-120.00		
SL-810-SA7-SB-0.0 -0.5	TETRACHLORO-M-XYLENE	122	45.00-120.00	All Target Analytes	J(all detects)

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# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-510-SA7-SB-0.0-0.5MS (TOT) SL-510-SA7-SB-0.0-0.5MSD (TOT) (SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-SB-0.0-0.5)	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	2585 140 3126 249 145 140 359	2282 198 2463 221 132 137 334	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	J (all detects) Al, Ca, Fe, Mg, Mn, Ti, No Qual, >4x
SL-510-SA7-SB-0.0-0.5MS (TOT) SL-510-SA7-SB-0.0-0.5MSD (TOT) (SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-SB-0.0-0.5)	ANTIMONY LEAD	67 -	64 185	75.00-125.00 75.00-125.00	- 24 (20.00)	ANTIMONY LEAD	J(all detects) UJ(all non-detects)

Method: 6020A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-510-SA7-SB-0.0-0.5MS (TOT) (SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-SB-0.0-0.5)	STRONTIUM	69	-	75.00-125.00	-	STRONTIUM	J(all detects) UJ(all non-detects)

Method: 8270D SIM

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-510-SA7-SB-0.0-0.5MS SL-510-SA7-SB-0.0-0.5MSD (SL-510-SA7-SB-0.0-0.5)	N-NITROSODIMETHYLAMINE	131	135	48.00-113.00	-	N-NITROSODIMETHYLAMINE	J(all detects)

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-510-SA7-SB-0.0-0.5MS SL-510-SA7-SB-0.0-0.5MSD (SL-510-SA7-SB-0.0-0.5)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	124 127 203	137 182 296	49.00-123.00 49.00-123.00 49.00-123.00	- - -	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J(all detects) EFH (C30-C40), No Qual, >4x

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# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-510-SA7-SB-0.0-0.5MSD (SL-510-SA7-SB-0.0-0.5)	OCDD	-	139	40.00-135.00	21 (20.00)	OCDD	J(all detects)



# Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-510-SA7-SB-0.0-0.5DUP (TOT) (SL-503-SA7-SB-0.0-0.5 SL -504-SA7-SB-0.0-0.5 SL -504-SA7-SB-4.0-5.0 SL -510-SA7-SB-0.0-0.5 SL -517-SA7-SB-0.0-0.5 SL -810-SA7-SB-0.0-0.5)	ANTIMONY BORON LEAD	200 33 43	20.00 20.00 20.00	J (all detects) UJ (all non-detects)  Sb, B, No Qual, OK by Difference

Method: 6020A

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-510-SA7-SB-0.0-0.5DUP (TOT) (SL-503-SA7-SB-0.0-0.5 SL -504-SA7-SB-0.0-0.5 SL -504-SA7-SB-4.0-5.0 SL -510-SA7-SB-0.0-0.5 SL -517-SA7-SB-0.0-0.5 SL -810-SA7-SB-0.0-0.5)	SILVER	44	20.00	No Qual, OK by Difference

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31149AQ320500A (SL-503-SA7-SB-0.0-0.5 SL-504-SA7-SB-0.0-0.5 SL-504-SA7-SB-4.0-5.0 SL-510-SA7-SB-0.0-0.5 SL-517-SA7-SB-0.0-0.5 SL-810-SA7-SB-0.0-0.5)	EFH (C30-C40)	55	-	65.00-128.00	-	EFH (C30-C40)	J (all detects) UJ (all non-detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Field Duplicate RPD Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 160.3M

Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5	SL-810-SA7-SB-0.0-0.5			
MOISTURE	3.7	3.0	21		No Qualifiers Applied

Method: 1613B

Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5	SL-810-SA7-SB-0.0-0.5			
1,2,3,4,6,7,8-HPCDD	23.2	22.3	4	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	4.70	4.40	7	50.00	
1,2,3,4,7,8,9-HPCDF	0.416	0.396	5	50.00	
1,2,3,4,7,8-HxCDD	0.317	0.357	12	50.00	
1,2,3,6,7,8-HxCDD	0.925	0.790	16	50.00	
1,2,3,7,8,9-HxCDD	0.703	0.622	12	50.00	
1,2,3,7,8,9-HxCDF	0.175	0.111	45	50.00	
1,2,3,7,8-PECDD	0.203	0.135	40	50.00	
1,2,3,7,8-PECDF	0.591	0.591	0	50.00	
2,3,4,6,7,8-HxCDF	0.478	0.315	41	50.00	
2,3,7,8-TCDF	0.258	0.249	4	50.00	
OCDD	177	171	3	50.00	
OCDF	10.9	11.8	8	50.00	
1,2,3,4,7,8-HxCDF	1.97	0.435	128	50.00	J(all detects)
1,2,3,6,7,8-HxCDF	0.497	0.267	60	50.00	
2,3,4,7,8-PECDF	0.824	0.375	75	50.00	

Method: 6010C

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5 (TOT)	SL-810-SA7-SB-0.0-0.5 (TOT)			
ALUMINUM	13600	14600	7	50.00	No Qualifiers Applied
ARSENIC	5.14	5.19	1	50.00	
BARIUM	73.5	74.3	1	50.00	
BERYLLIUM	0.542	0.589	8	50.00	
CADMIUM	0.120	0.0868	32	50.00	
CALCIUM	2950	2670	10	50.00	
CHROMIUM	20.4	19.7	3	50.00	
COBALT	4.80	5.14	7	50.00	
COPPER	12.8	13.2	3	50.00	
IRON	22600	24100	6	50.00	
LITHIUM	26.6	26.9	1	50.00	
MAGNESIUM	5300	5060	5	50.00	
MANGANESE	276	299	8	50.00	
MOLYBDENUM	0.302	0.290	4	50.00	
NICKEL	10.9	10.5	4	50.00	
PHOSPHORUS	436	486	11	50.00	
POTASSIUM	3480	4010	14	50.00	
SODIUM	75.9	73.3	3	50.00	
TIN	3.14	3.05	3	50.00	
TITANIUM	1170	1190	2	50.00	
VANADIUM	36.7	38.6	5	50.00	
ZINC	62.4	69.1	10	50.00	
Zirconium	2.52	2.72	8	50.00	
ANTIMONY	4.11 U	0.940	200	50.00	J(all detects) UJ(all non-detects)
BORON	5.94	2.59	79	50.00	
LEAD	29.2	81.7	95	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Field Duplicate RPD Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6020A

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5 (TOT)	SL-810-SA7-SB-0.0-0.5 (TOT)			
SILVER	0.0279	0.0404	37	50.00	No Qualifiers Applied
STRONTIUM	13.2	11.4	15	50.00	
THALLIUM	0.283	0.211	29	50.00	
SELENIUM	0.411 U	0.144	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471B

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5 (TOT)	SL-810-SA7-SB-0.0-0.5 (TOT)			
MERCURY	0.0167	0.0219	27	50.00	No Qualifiers Applied

Method: 8015M

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5	SL-810-SA7-SB-0.0-0.5			
EFH (C21-C30)	6.9	13	61	50.00	J(all detects)
EFH (C30-C40)	21	39	60	50.00	

Method: 8081B

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5	SL-810-SA7-SB-0.0-0.5			
4,4'-DDE	0.67	1.4	71	50.00	J(all detects) UJ(all non-detects)
4,4'-DDT	0.72	1.8 U	200	50.00	

Method: 8082A

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5	SL-810-SA7-SB-0.0-0.5			
AROCLOR 1254	14	25	56	50.00	J(all detects)
Aroclor 5460	17	32	61	50.00	

Method: 8270D SIM

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5	SL-810-SA7-SB-0.0-0.5			
BENZO(K)FLUORANTHENE	9.4	8.5	10	50.00	No Qualifiers Applied
CHRYSENE	2.9	1.9	42	50.00	
NAPHTHALENE	0.93	1.2	25	50.00	
PHENANTHRENE	1.9	1.3	37	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Field Duplicate RPD Report

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method:** 8270D SIM

**Matrix:** SO

BENZO(A)ANTHRACENE	1.3	0.74	55	50.00	J(all detects) UJ(all non-detects)
BENZO(A)PYRENE	1.8	1.0	57	50.00	
BENZO(B)FLUORANTHENE	5.0	2.4	70	50.00	
BENZO(G,H,I)PERYLENE	1.4	0.83	51	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	7.3	76	165	50.00	
FLUORANTHENE	4.1	2.1	65	50.00	
FLUORENE	1.7 U	0.69	200	50.00	
INDENO(1,2,3-CD)PYRENE	2.0	0.69	97	50.00	
PYRENE	3.4	1.8	62	50.00	

**Method:** 9045M

**Matrix:** SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-510-SA7-SB-0.0-0.5	SL-810-SA7-SB-0.0-0.5			
PH	6.77	6.68	1	50.00	No Qualifiers Applied



# Reporting Limit Outliers

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-503-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.35	4.99	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.247	4.99	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.442	4.99	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.420	4.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	1.09	4.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.402	4.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.00	4.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.141	4.99	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.335	4.99	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.856	4.99	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.309	4.99	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.547	4.99	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0642	0.998	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.815	0.998	PQL	ng/Kg	
	OCDF	JB	4.30	9.98	PQL	ng/Kg	
SL-504-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.32	5.13	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	3.10	5.13	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.49	5.13	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.22	5.13	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	1.13	5.13	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.35	5.13	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.70	5.13	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.950	5.13	PQL	ng/Kg	
SL-504-SA7-SB-4.0-5.0	2,3,7,8-TCDD	J	0.0782	1.03	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	3.96	5.20	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.313	5.20	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.329	5.20	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.235	5.20	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.835	5.20	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.206	5.20	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.755	5.20	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.181	5.20	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.163	5.20	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.203	5.20	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.255	5.20	PQL	ng/Kg	
SL-510-SA7-SB-0.0-0.5	2,3,4,7,8-PECDF	JB	0.187	5.20	PQL	ng/Kg	J (all detects)
	2,3,7,8-TCDF	J	0.133	1.04	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	4.70	5.00	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.416	5.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.317	5.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.97	5.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.925	5.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.497	5.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.703	5.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.175	5.00	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.203	5.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.591	5.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.478	5.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.824	5.00	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.258	0.999	PQL	ng/Kg	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.86	5.08	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	1.84	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	2.90	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	4.56	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	3.72	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.758	5.08	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	2.02	5.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.93	5.08	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.126	1.02	PQL	ng/Kg	
SL-810-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.40	4.97	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.396	4.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.357	4.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.435	4.97	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.790	4.97	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.267	4.97	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.622	4.97	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.111	4.97	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.135	4.97	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.591	4.97	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.315	4.97	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.375	4.97	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.249	0.994	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-503-SA7-SB-0.0-0.5	BERYLLIUM	J	0.454	1.01	PQL	mg/Kg	J (all detects)
	BORON	J	6.61	10.1	PQL	mg/Kg	
	CADMIUM	J	0.462	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.331	2.03	PQL	mg/Kg	
	SODIUM	J	70.3	101	PQL	mg/Kg	
	TIN	J	2.92	10.1	PQL	mg/Kg	
	Zirconium	J	2.45	5.07	PQL	mg/Kg	
SL-504-SA7-SB-0.0-0.5	ANTIMONY	J	0.866	3.97	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.515	0.991	PQL	mg/Kg	
	BORON	J	2.39	9.91	PQL	mg/Kg	
	CADMIUM	J	0.239	0.991	PQL	mg/Kg	
	MOLYBDENUM	J	0.279	1.98	PQL	mg/Kg	
	TIN	J	3.18	9.91	PQL	mg/Kg	
	Zirconium	J	2.35	4.96	PQL	mg/Kg	
SL-504-SA7-SB-4.0-5.0	ANTIMONY	J	0.826	4.15	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.657	1.04	PQL	mg/Kg	
	BORON	J	1.56	10.4	PQL	mg/Kg	
	CADMIUM	J	0.0757	1.04	PQL	mg/Kg	
	MOLYBDENUM	J	0.289	2.07	PQL	mg/Kg	
	SODIUM	J	98.1	104	PQL	mg/Kg	
	TIN	J	3.42	10.4	PQL	mg/Kg	
	Zirconium	J	2.53	5.19	PQL	mg/Kg	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Reporting Limit Outliers

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method:** 6010C

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-510-SA7-SB-0.0-0.5	BERYLLIUM	J	0.542	1.03	PQL	mg/Kg	J (all detects)
	BORON	J	5.94	10.3	PQL	mg/Kg	
	CADMIUM	J	0.120	1.03	PQL	mg/Kg	
	MOLYBDENUM	J	0.302	2.06	PQL	mg/Kg	
	SODIUM	J	75.9	103	PQL	mg/Kg	
	TIN	J	3.14	10.3	PQL	mg/Kg	
	Zirconium	J	2.52	5.14	PQL	mg/Kg	
SL-517-SA7-SB-0.0-0.5	ANTIMONY	J	1.06	4.05	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.510	1.01	PQL	mg/Kg	
	BORON	J	3.35	10.1	PQL	mg/Kg	
	CADMIUM	J	0.399	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.345	2.02	PQL	mg/Kg	
	SODIUM	J	86.4	101	PQL	mg/Kg	
	TIN	J	3.19	10.1	PQL	mg/Kg	
SL-810-SA7-SB-0.0-0.5	ANTIMONY	J	0.940	4.08	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.589	1.02	PQL	mg/Kg	
	BORON	J	2.59	10.2	PQL	mg/Kg	
	CADMIUM	J	0.0868	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.290	2.04	PQL	mg/Kg	
	SODIUM	J	73.3	102	PQL	mg/Kg	
	TIN	J	3.05	10.2	PQL	mg/Kg	
	Zirconium	J	2.72	5.10	PQL	mg/Kg	

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-503-SA7-SB-0.0-0.5	SELENIUM	J	0.131	0.405	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0521	0.203	PQL	mg/Kg	
SL-504-SA7-SB-0.0-0.5	SILVER	J	0.0222	0.198	PQL	mg/Kg	J (all detects)
SL-504-SA7-SB-4.0-5.0	SILVER	J	0.0686	0.207	PQL	mg/Kg	J (all detects)
SL-510-SA7-SB-0.0-0.5	SILVER	J	0.0279	0.206	PQL	mg/Kg	J (all detects)
SL-517-SA7-SB-0.0-0.5	SILVER	J	0.0593	0.202	PQL	mg/Kg	J (all detects)
SL-810-SA7-SB-0.0-0.5	SELENIUM	J	0.144	0.408	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0404	0.204	PQL	mg/Kg	

**Method:** 7471B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-504-SA7-SB-4.0-5.0	MERCURY	J	0.0170	0.0175	PQL	mg/Kg	J (all detects)



# Reporting Limit Outliers

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-503-SA7-SB-0.0-0.5	EFH (C15-C20)	J	2.3	5.1	PQL	mg/Kg	J (all detects)
SL-504-SA7-SB-4.0-5.0	EFH (C15-C20)	J	4.7	5.3	PQL	mg/Kg	J (all detects)

Method: 8081B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-503-SA7-SB-0.0-0.5	4,4'-DDT	J	0.83	1.7	PQL	ug/Kg	J (all detects)
SL-510-SA7-SB-0.0-0.5	4,4'-DDE	J	0.67	1.8	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.72	1.8	PQL	ug/Kg	
SL-810-SA7-SB-0.0-0.5	4,4'-DDE	J	1.4	1.8	PQL	ug/Kg	J (all detects)

Method: 8082A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-503-SA7-SB-0.0-0.5	AROCLOR 1254	J	11	17	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	16	34	PQL	ug/Kg	
SL-504-SA7-SB-4.0-5.0	AROCLOR 1254	J	8.3	18	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	13	35	PQL	ug/Kg	
SL-510-SA7-SB-0.0-0.5	AROCLOR 1254	J	14	18	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	17	34	PQL	ug/Kg	
SL-810-SA7-SB-0.0-0.5	Aroclor 5460	J	32	34	PQL	ug/Kg	J (all detects)

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-503-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.0	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.6	1.7	PQL	ug/Kg	
	ANTHRACENE	J	0.45	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.92	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.4	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.77	1.7	PQL	ug/Kg	
SL-504-SA7-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	8.7	17	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	8.2	17	PQL	ug/Kg	
	FLUORANTHENE	J	10	17	PQL	ug/Kg	
	PYRENE	J	8.7	17	PQL	ug/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH036

Laboratory: LL

EDD Filename: PH036\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-504-SA7-SB-4.0-5.0	BENZO(A)PYRENE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.74	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.6	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	FLUORENE	J	0.86	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.84	1.8	PQL	ug/Kg	
	PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-510-SA7-SB-0.0-0.5	BENZO(A)ANTHRACENE	J	1.3	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.4	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.3	19	PQL	ug/Kg	
	NAPHTHALENE	J	0.93	1.7	PQL	ug/Kg	
SL-517-SA7-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	13	17	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	14	17	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	8.6	17	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	150	180	PQL	ug/Kg	
	CHRYSENE	J	9.1	17	PQL	ug/Kg	
	FLUORANTHENE	J	11	17	PQL	ug/Kg	
	NAPHTHALENE	J	8.6	17	PQL	ug/Kg	
	PHENANTHRENE	J	14	17	PQL	ug/Kg	
	PYRENE	J	10	17	PQL	ug/Kg	
SL-810-SA7-SB-0.0-0.5	BENZO(A)ANTHRACENE	J	0.74	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.0	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.83	1.7	PQL	ug/Kg	
	FLUORENE	J	0.69	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.69	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.7	PQL	ug/Kg	



LDC #: 29836J4

SDG #: PH036

Laboratory: Eurofins Lancaster Laboratories

## VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 6/11/13

Page: 1 of 1

Reviewer: CR

2nd Reviewer: [Signature]

**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: 4/22/13
II.	ICP/MS Tune	-	
III.	Calibration	-	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	-	
VI.	Matrix Spike Analysis	SW	MS10
VII.	Duplicate Sample Analysis	SW	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	D	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	-	
XV.	Field Blanks	SW	FB = FB-041113 (PH029) EB = EB-042413

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

(PH038)

Validated Samples:

1	SL-510-SA7-SB-0.0-0.5	11		21		31	
2	SL-810-SA7-SB-0.0-0.5	12		22		32	
3	SL-503-SA7-SB-0.0-0.5	13		23		33	
4	SL-504-SA7-SB-0.0-0.5	14		24		34	
5	SL-504-SA7-SB-4.0-5.0	15		25		35	
6	SL-517-SA7-SB-0.0-0.5	16		26		36	
7	SL-510-SA7-SB-0.0-0.5MS	17		27		37	
8	SL-510-SA7-SB-0.0-0.5MSD	18		28		38	
9	SL-510-SA7-SB-0.0-0.5DUP	19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_



VALIDATION FINDINGS WORKSHEET  
Field BlanksPage: 1 of 1  
Reviewer:                       
2nd Reviewer:                     

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

Blank units: mg/L Associated sample units: mg/Kg Reason: F  
Sampling date: EB=4/24/13 FB=4/11/13 Soil factor applied 100x  
Field blank type: (circle one) Field Blank / Rinsate / Other: All Associated Samples: All

Analyte	Blank ID	Blank ID	Sample Identification					
			1	2	3	4	5	6
	EB-042413	FB-041113	Action Limit					
B	0.0319		15.95	2.6	6.6	2.4	1.6	3.3
Cu		0.0036	1.8					
Mo		0.0036	1.8	0.29	0.33	0.28	0.29	0.34
Na	0.228		114	75.9	70.3	107	98.1	86.4
Sn	0.0035		1.75					

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".



QUALITY ASSURANCE SUMMARY  
FORM 5A(MS/MSD)  
MATRIX SPIKE/MATRIX SPIKE DUPLICATE  
SDG No.: PH036  
Matrix: SOIL  
Level  
(low/med): LOWBackground Lab Sample ID: 7031213BKG Matrix Spike Lab Sample ID: 7031214MS Matrix Spike Duplicate Lab Sample ID: 7031215MSD  
Batch Id(s): P11537A, P11538A

Analyte	Mass	BKG Sample		MS Sample		MSD Sample		MS Spike Added	MSD Spike Added	Units	MS		MSD		Control Limit	
		Result	C	Result	C	Result	C				%R	Q	%R	Q	%R	RPD M
Aluminum		13055.5842		18474.6980		17574.0624		198.0198	198.0198	MG/KG	2585		2282			20P
Antimony		0.4950 U		33.0871		31.7772		49.5050	49.5050	MG/KG	67 N		64 N		75 - 125	20P
Arsenic		4.9535		19.0772		20.5337		14.8515	14.8515	MG/KG	95		105		75 - 125	20P
Barium		70.7465		277.4911		280.3436		198.0198	198.0198	MG/KG	104		106		75 - 125	20P
Beryllium		0.5218 B		5.7465		5.6762		4.9505	4.9505	MG/KG	106		104		75 - 125	20P
Boron		5.7238 B		205.0119		203.9525		198.0198	198.0198	MG/KG	101		100		75 - 125	20P
Cadmium		0.1158 B		4.9277		4.9911		4.9505	4.9505	MG/KG	97		98		75 - 125	20P
Calcium		2837.9713		3392.9188		3620.8891		396.0396	396.0396	MG/KG	140		138			20P
Chromium		19.6812		40.8624		40.2050		19.8020	19.8020	MG/KG	107		104		75 - 125	20P
Cobalt		4.6188		54.2059		54.1099		49.5050	49.5050	MG/KG	100		100		75 - 125	20P
Copper		12.3624		39.8010		39.6396		24.7525	24.7525	MG/KG	111		110		75 - 125	20P
Iron		21799.8050		24894.9406		24238.8356		99.0099	99.0099	MG/KG	3126		2468			20P
Lead		28.1188		43.6218		55.6139		14.8515	14.8515	MG/KG	104		185 N		75 - 125	20P
Lithium		25.6307		127.2257		125.7139		99.0099	99.0099	MG/KG	103		101		75 - 125	20P
Magnesium		5099.7802		5593.6198		5537.1941		198.0198	198.0198	MG/KG	249		221			20P
Manganese		265.7693		337.7327		330.8832		49.5050	49.5050	MG/KG	145		132			20P
Mercury		0.0161		0.1857		0.1819		0.1613	0.1599	MG/KG	105		104		65 - 135	20CV
Molybdenum		0.2911 B		195.8297		195.5812		198.0198	198.0198	MG/KG	99		99		75 - 125	20P
Nickel		10.5436		61.3792		60.5426		49.5050	49.5050	MG/KG	103		101		75 - 125	20P
Phosphorus		419.5990		497.2386		531.2683		99.0099	99.0099	MG/KG	78		113			20P
Potassium		3349.7356		4739.7426		4705.9772		990.0990	990.0990	MG/KG	140 N		137 N		75 - 125	20P
Selenium	78	0.0990 U		1.8723		1.7873		1.9802	1.9802	MG/KG	95		90		75 - 125	20MS
Silver	107	0.0269 B		9.5188		9.7287		9.9010	9.9010	MG/KG	96		98		75 - 125	20MS
Sodium		73.1257 B		1052.5950		1044.8911		990.0990	990.0990	MG/KG	99		98		75 - 125	20P
Strontium	88	12.6772		18.1030		18.6178		7.9208	7.9208	MG/KG	69 N		75		75 - 125	20MS
Thallium	203	0.2721		0.6164		0.6297		0.3960	0.3960	MG/KG	87		90		75 - 125	20MS
Tin		3.0198 B		376.9842		379.1960		396.0396	396.0396	MG/KG	94		95		75 - 125	20P
Titanium		1124.1772		1479.8980		1455.3624		99.0099	99.0099	MG/KG	359		334			20P
Vanadium		35.3881		91.7436		90.6317		49.5050	49.5050	MG/KG	114		112		75 - 125	20P
Zinc		60.0772		112.5149		112.6594		49.5050	49.5050	MG/KG	106		106		75 - 125	20P
Zirconium		2.4277 B		100.4238		99.0079		99.0099	99.0099	MG/KG	99		98		75 - 125	20P

Note: Results shown are reported on an as-received basis.

## METHODS:

P = ICP Atomic Emission Spectrometer CV = Cold Vapor

MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

## CONCENTRATION QUALIFIERS:

U= Below MDL, B= Below LOQ

## FLAGS:

N = Matrix Spike OOS, \* = Duplicate OOS





QUALITY ASSURANCE SUMMARY

FORM 6

DUPLICATES

SDG No.: PH036

Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 7031213BKG

Duplicate Lab Sample ID: 7031216DUP

Batch ID(s): P11537A, P11538A

Concentration Units: MG/KG

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			13055.5842		14577.3594		11		P
Antimony			0.4950	U	0.5396	B	200		P
Arsenic		4.0	4.9535		5.1198		3		P
Barium			70.7465		77.8525		10		P
Beryllium			0.5218	B	0.5792	B	10		P
Boron			5.7238	B	7.9891	B	53		P
Cadmium			0.1158	B	0.1376	B	17		P
Calcium			2837.9713		3064.0950		8		P
Chromium			19.6812		20.3525		3		P
Cobalt		1.0	4.6188		5.2752		13		P
Copper			12.3624		13.2485		7		P
Iron			21799.8050		23474.8178		7		P
Lead			28.1188		43.6267		43	*	P
Lithium			25.6307		25.7208		0		P
Magnesium			5099.7802		5184.6317		2		P
Manganese			265.7693		297.5257		11		P
Mercury		0.0	0.0161		0.0142	B	13		CV
Molybdenum			0.2911	B	0.3139	B	8		P
Nickel			10.5436		11.2050		6		P
Phosphorus			419.5990		438.5455		4		P
Potassium			3349.7356		3625.6059		8		P
Selenium	78		0.0990	U	0.0990	U			MS
Silver	107		0.0269	B	0.0419	B	44		MS
Sodium			73.1257	B	77.5347	B	6		P
Strontium	88		12.6772		12.9921		2		MS
Thallium	203	0.2	0.2721		0.2644		3		MS
Tin			3.0198	B	3.2386	B	7		P
Titanium			1124.1772		1232.5713		9		P
Vanadium			35.3881		39.0624		10		P
Zinc			60.0772		62.1208		3		P
Zirconium			2.4277	B	2.7624	B	13		P

NOTE: An asterisk (\*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).

The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Note: Results shown are reported on an as-received basis.

<p><b>METHODS:</b></p> <p>P = ICP Atomic Emission Spectrometer</p> <p>MS = ICP Mass Spectrometry</p> <p>CV = Cold Vapor</p> <p>AF = Cold Vapor Atomic Fluorescence</p>	<p><b>CONCENTRATION QUALIFIERS:</b></p> <p>U= Below MDL</p> <p>B= Below LOQ</p> <p><b>FLAGS:</b></p> <p>PH036 Page 2809 of 2988</p> <p>Duplicate Out of Spec</p>
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## **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
23-Apr-2013	TB-042313	7032823	TB	5030B	8015M	III
23-Apr-2013	SL-526-SA7-SB-0.0-0.5	7032824	N	3050B	6010C	III
23-Apr-2013	SL-526-SA7-SB-0.0-0.5	7032824	N	3050B	6020A	III
23-Apr-2013	SL-526-SA7-SB-0.0-0.5	7032824	N	3546	8015M	III
23-Apr-2013	SL-526-SA7-SB-0.0-0.5	7032824	N	3546	8082A	III
23-Apr-2013	SL-526-SA7-SB-0.0-0.5	7032824	N	3546	8270D SIM	III
23-Apr-2013	SL-526-SA7-SB-0.0-0.5	7032824	N	METHOD	1613B	III
23-Apr-2013	SL-526-SA7-SB-0.0-0.5	7032824	N	METHOD	7471B	III
23-Apr-2013	SL-526-SA7-SB-3.5-4.5	7032825	N	3050B	6010C	III
23-Apr-2013	SL-526-SA7-SB-3.5-4.5	7032825	N	3050B	6020A	III
23-Apr-2013	SL-526-SA7-SB-3.5-4.5	7032825	N	3546	8015M	III
23-Apr-2013	SL-526-SA7-SB-3.5-4.5	7032825	N	3546	8082A	III
23-Apr-2013	SL-526-SA7-SB-3.5-4.5	7032825	N	3546	8270D SIM	III
23-Apr-2013	SL-526-SA7-SB-3.5-4.5	7032825	N	5035A	8015M	III
23-Apr-2013	SL-526-SA7-SB-3.5-4.5	7032825	N	METHOD	1613B	III
23-Apr-2013	SL-526-SA7-SB-3.5-4.5	7032825	N	METHOD	7471B	III
23-Apr-2013	SL-512-SA7-SB-0.0-0.5	7032826	N	3050B	6010C	III
23-Apr-2013	SL-512-SA7-SB-0.0-0.5	7032826	N	3050B	6020A	III
23-Apr-2013	SL-512-SA7-SB-0.0-0.5	7032826	N	3546	8015M	III
23-Apr-2013	SL-512-SA7-SB-0.0-0.5	7032826	N	3546	8082A	III
23-Apr-2013	SL-512-SA7-SB-0.0-0.5	7032826	N	3546	8270D SIM	III
23-Apr-2013	SL-512-SA7-SB-0.0-0.5	7032826	N	METHOD	1613B	III
23-Apr-2013	SL-512-SA7-SB-0.0-0.5	7032826	N	METHOD	7471B	III
23-Apr-2013	SL-525-SA7-SB-0.0-0.5	7032827	N	3050B	6010C	III
23-Apr-2013	SL-525-SA7-SB-0.0-0.5	7032827	N	3050B	6020A	III
23-Apr-2013	SL-525-SA7-SB-0.0-0.5	7032827	N	3546	8015M	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Apr-2013	SL-525-SA7-SB-0.0-0.5	7032827	N	3546	8082A	III
23-Apr-2013	SL-525-SA7-SB-0.0-0.5	7032827	N	3546	8270D SIM	III
23-Apr-2013	SL-525-SA7-SB-0.0-0.5	7032827	N	METHOD	1613B	III
23-Apr-2013	SL-525-SA7-SB-0.0-0.5	7032827	N	METHOD	7471B	III



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-512-SA7-SB-0.0-0.5

Collected: 4/23/2013 11:35:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.627	J	0.508	MDL	4.06	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.556	J	0.0680	MDL	1.02	PQL	mg/Kg	J	Z
BORON	1.09	J	0.843	MDL	10.2	PQL	mg/Kg	U	F
CADMIUM	0.152	J	0.0335	MDL	1.02	PQL	mg/Kg	J	Z
CALCIUM	3070		4.08	MDL	20.3	PQL	mg/Kg	J	E
COBALT	4.43		0.0914	MDL	1.02	PQL	mg/Kg	J	E
LEAD	5.65		0.477	MDL	3.05	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.186	J	0.173	MDL	2.03	PQL	mg/Kg	U	F
NICKEL	8.79		0.112	MDL	2.03	PQL	mg/Kg	J	A
PHOSPHORUS	315		0.518	MDL	10.2	PQL	mg/Kg	J	A, E
POTASSIUM	2670		13.7	MDL	102	PQL	mg/Kg	J	Q
SODIUM	63.8	J	17.0	MDL	102	PQL	mg/Kg	U	F
TIN	2.76	J	0.223	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.31	J	0.843	MDL	5.08	PQL	mg/Kg	J	Z

Sample ID: SL-525-SA7-SB-0.0-0.5

Collected: 4/23/2013 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	0.545	J	0.511	MDL	4.09	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.510	J	0.0685	MDL	1.02	PQL	mg/Kg	J	Z
BORON	3.20	J	0.849	MDL	10.2	PQL	mg/Kg	U	F
CADMIUM	0.231	J	0.0337	MDL	1.02	PQL	mg/Kg	J	Z
CALCIUM	3910		4.11	MDL	20.4	PQL	mg/Kg	J	E
COBALT	3.90		0.0920	MDL	1.02	PQL	mg/Kg	J	E
LEAD	12.5		0.480	MDL	3.07	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.388	J	0.174	MDL	2.04	PQL	mg/Kg	U	F
NICKEL	8.31		0.112	MDL	2.04	PQL	mg/Kg	J	A
PHOSPHORUS	305		0.521	MDL	10.2	PQL	mg/Kg	J	A, E
POTASSIUM	3300		13.8	MDL	102	PQL	mg/Kg	J	Q
SODIUM	67.4	J	17.1	MDL	102	PQL	mg/Kg	U	F
TIN	2.79	J	0.225	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.29	J	0.849	MDL	5.11	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-526-SA7-SB-0.0-0.5

Collected: 4/23/2013 9:25:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.33	U	0.542	MDL	4.33	PQL	mg/Kg	UJ	Q
BERYLLIUM	0.629	J	0.0726	MDL	1.08	PQL	mg/Kg	J	Z
BORON	12.6		0.899	MDL	10.8	PQL	mg/Kg	U	F
CADMIUM	0.233	J	0.0357	MDL	1.08	PQL	mg/Kg	J	Z
CALCIUM	3050		4.35	MDL	21.7	PQL	mg/Kg	J	E
COBALT	4.64		0.0975	MDL	1.08	PQL	mg/Kg	J	E
LEAD	6.86		0.509	MDL	3.25	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.354	J	0.184	MDL	2.17	PQL	mg/Kg	U	F
NICKEL	9.24		0.119	MDL	2.17	PQL	mg/Kg	J	A
PHOSPHORUS	300		0.552	MDL	10.8	PQL	mg/Kg	J	A, E
POTASSIUM	2980		14.6	MDL	108	PQL	mg/Kg	J	Q
SODIUM	90.5	J	18.1	MDL	108	PQL	mg/Kg	U	F
TIN	3.05	J	0.238	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.78	J	0.899	MDL	5.42	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-3.5-4.5

Collected: 4/23/2013 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	0.729	J	0.518	MDL	4.14	PQL	mg/Kg	UJ	B, Q
BERYLLIUM	0.817	J	0.0693	MDL	1.04	PQL	mg/Kg	J	Z
BORON	11.6		0.859	MDL	10.4	PQL	mg/Kg	U	F
CADMIUM	0.0952	J	0.0342	MDL	1.04	PQL	mg/Kg	J	Z
CALCIUM	2520		4.16	MDL	20.7	PQL	mg/Kg	J	E
COBALT	3.89		0.0932	MDL	1.04	PQL	mg/Kg	J	E
LEAD	6.34		0.486	MDL	3.11	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.528	J	0.176	MDL	2.07	PQL	mg/Kg	U	F
NICKEL	9.17		0.114	MDL	2.07	PQL	mg/Kg	J	A
PHOSPHORUS	164		0.528	MDL	10.4	PQL	mg/Kg	J	A, E
POTASSIUM	1370		14.0	MDL	104	PQL	mg/Kg	J	Q
TIN	3.24	J	0.228	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.90	J	0.859	MDL	5.18	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-512-SA7-SB-0.0-0.5

Collected: 4/23/2013 11:35:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.164	J	0.102	MDL	0.406	PQL	mg/Kg	J	Z

Sample ID: SL-525-SA7-SB-0.0-0.5

Collected: 4/23/2013 2:20:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.182	J	0.102	MDL	0.409	PQL	mg/Kg	J	Z

Sample ID: SL-525-SA7-SB-0.0-0.5

Collected: 4/23/2013 2:20:00

Analysis Type: RES/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0696	J	0.0204	MDL	0.204	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-0.0-0.5

Collected: 4/23/2013 9:25:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.108	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-0.0-0.5

Collected: 4/23/2013 9:25:00

Analysis Type: RES/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0470	J	0.0217	MDL	0.217	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-3.5-4.5

Collected: 4/23/2013 10:55:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.104	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-3.5-4.5

Collected: 4/23/2013 10:55:00

Analysis Type: RES/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0711	J	0.0207	MDL	0.207	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

Sample ID: SL-512-SA7-SB-0.0-0.5

Collected: 4/23/2013 11:35:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0133	J	0.0100	MDL	0.0162	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-0.0-0.5

Collected: 4/23/2013 9:25:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0165	J	0.0110	MDL	0.0178	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-3.5-4.5

Collected: 4/23/2013 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
MERCURY	0.0156	J	0.0108	MDL	0.0174	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-512-SA7-SB-0.0-0.5

Collected: 4/23/2013 11:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.84	JB	0.0188	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.796	JB	0.0119	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0704	JBQ	0.0178	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0741	J	0.0222	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.0849	JBQ	0.0180	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.196	JQ	0.0219	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.0905	JBQ	0.0167	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.187	JB	0.0213	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDF	0.0642	JBQ	0.0193	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0631	JQ	0.0196	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.175	JB	0.0122	MDL	4.99	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0843	JB	0.0169	MDL	4.99	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0832	JBQ	0.0121	MDL	4.99	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0662	JQ	0.0189	MDL	0.999	PQL	ng/Kg	J	Z
OCDF	1.66	JB	0.0189	MDL	9.99	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-525-SA7-SB-0.0-0.5

Collected: 4/23/2013 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	0.351	JB	0.0483	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.290	J	0.0472	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.393	JB	0.0433	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	1.23	J	0.0476	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.544	JB	0.0411	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.719	JB	0.0451	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.129	JB	0.0474	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.235	J	0.0588	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	4.47	JB	0.0426	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.571	JB	0.0440	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.726	JBQ	0.0416	MDL	5.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.350	J	0.0780	MDL	1.02	PQL	ng/Kg	J	Z
OCDF	7.98	JB	0.0340	MDL	10.2	PQL	ng/Kg	J	Z

Sample ID: SL-526-SA7-SB-0.0-0.5

Collected: 4/23/2013 9:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.65	JB	0.0225	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.149	JB	0.0299	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.212	JQ	0.0341	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.206	JB	0.0283	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	0.518	J	0.0355	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.226	JB	0.0256	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.401	JB	0.0337	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.129	JBQ	0.0282	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.231	JQ	0.0330	MDL	5.30	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.70	JB	0.0193	MDL	5.30	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.184	JB	0.0250	MDL	5.30	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.258	JBQ	0.0184	MDL	5.30	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0301	JQ	0.0258	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0866	JQ	0.0331	MDL	1.06	PQL	ng/Kg	J	Z
OCDF	2.71	JB	0.0267	MDL	10.6	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-526-SA7-SB-3.5-4.5

Collected: 4/23/2013 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	1.41	JB	0.0233	MDL	5.16	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.358	JB	0.0141	MDL	5.16	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0558	JBQ	0.0174	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0344	JQ	0.0198	MDL	5.16	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.0698	JB	0.0156	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0768	JQ	0.0201	MDL	5.16	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.0623	JBQ	0.0150	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0729	JB	0.0187	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0848	JQ	0.0208	MDL	5.16	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.316	JB	0.0134	MDL	5.16	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HxCDF	0.0431	JBQ	0.0144	MDL	5.16	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0855	JB	0.0128	MDL	5.16	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0316	J	0.0198	MDL	1.03	PQL	ng/Kg	J	Z
OCDF	0.578	JB	0.0202	MDL	10.3	PQL	ng/Kg	J	Z

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-512-SA7-SB-0.0-0.5

Collected: 4/23/2013 11:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	29		4.1	MDL	10	PQL	mg/Kg	J	L

Sample ID: SL-525-SA7-SB-0.0-0.5

Collected: 4/23/2013 2:20:00

Analysis Type: RES

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	23	J	10	MDL	26	PQL	mg/Kg	J	Z
EFH (C30-C40)	72		21	MDL	52	PQL	mg/Kg	J	L

Sample ID: SL-526-SA7-SB-0.0-0.5

Collected: 4/23/2013 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
EFH (C30-C40)	27		4.4	MDL	11	PQL	mg/Kg	J	L

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

**Sample ID:** SL-526-SA7-SB-3.5-4.5

**Collected:** 4/23/2013 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
EFH (C30-C40)	24		4.3	MDL	11	PQL	mg/Kg	J	L

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

**Sample ID:** SL-512-SA7-SB-0.0-0.5

**Collected:** 4/23/2013 11:35:00

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.90	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.99	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

**Sample ID:** SL-525-SA7-SB-0.0-0.5

**Collected:** 4/23/2013 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
2-METHYLNAPHTHALENE	0.81	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.50	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.3	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.5	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.96	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

**Sample ID:** SL-526-SA7-SB-0.0-0.5

**Collected:** 4/23/2013 9:25:00

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.86	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.94	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.75	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-526-SA7-SB-0.0-0.5

Collected: 4/23/2013 9:25:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	0.81	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

### Reason Code Legend

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

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH037



# Method Blank Outlier Report

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method:</b> 1613B <b>Matrix:</b> SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1200B371904	5/1/2013 7:04:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0731 ng/Kg 0.0401 ng/Kg 0.0269 ng/Kg 0.0375 ng/Kg 0.0203 ng/Kg 0.0225 ng/Kg 0.0140 ng/Kg 0.0365 ng/Kg 0.0283 ng/Kg 0.0100 ng/Kg 0.155 ng/Kg 0.107 ng/Kg	SL-512-SA7-SB-0.0-0.5 SL-525-SA7-SB-0.0-0.5 SL-526-SA7-SB-0.0-0.5 SL-526-SA7-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-512-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0704 ng/Kg	0.0704U ng/Kg
SL-512-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0849 ng/Kg	0.0849U ng/Kg
SL-512-SA7-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0905 ng/Kg	0.0905U ng/Kg
SL-512-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0642 ng/Kg	0.0642U ng/Kg
SL-512-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.175 ng/Kg	0.175U ng/Kg
SL-512-SA7-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0843 ng/Kg	0.0843U ng/Kg
SL-526-SA7-SB-3.5-4.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0558 ng/Kg	0.0558U ng/Kg
SL-526-SA7-SB-3.5-4.5(RES)	1,2,3,4,7,8-HXCDF	0.0698 ng/Kg	0.0698U ng/Kg
SL-526-SA7-SB-3.5-4.5(RES)	1,2,3,6,7,8-HXCDF	0.0623 ng/Kg	0.0623U ng/Kg
SL-526-SA7-SB-3.5-4.5(RES)	1,2,3,7,8,9-HXCDD	0.0729 ng/Kg	0.0729U ng/Kg
SL-526-SA7-SB-3.5-4.5(RES)	2,3,4,6,7,8-HXCDF	0.0431 ng/Kg	0.0431U ng/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P12237AB221100	5/3/2013 11:00:00 AM	PHOSPHORUS TIN	1.44 mg/Kg 1.47 mg/Kg	SL-512-SA7-SB-0.0-0.5 SL-525-SA7-SB-0.0-0.5 SL-526-SA7-SB-0.0-0.5 SL-526-SA7-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-512-SA7-SB-0.0-0.5(RES/TOT)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-525-SA7-SB-0.0-0.5(RES/TOT)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-526-SA7-SB-0.0-0.5(RES/TOT)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-526-SA7-SB-3.5-4.5(RES/TOT)	TIN	3.24 mg/Kg	3.24U mg/Kg

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# Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-042413(RES)	4/24/2013 3:00:00 PM	BORON SODIUM TIN	0.0319 mg/L 0.228 mg/L 0.0035 mg/L	SL-512-SA7-SB-0.0-0.5 SL-525-SA7-SB-0.0-0.5 SL-526-SA7-SB-0.0-0.5 SL-526-SA7-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-512-SA7-SB-0.0-0.5(RES/TOT)	BORON	1.09 mg/Kg	1.09U mg/Kg
SL-512-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	63.8 mg/Kg	63.8U mg/Kg
SL-525-SA7-SB-0.0-0.5(RES/TOT)	BORON	3.20 mg/Kg	3.20U mg/Kg
SL-525-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	67.4 mg/Kg	67.4U mg/Kg
SL-526-SA7-SB-0.0-0.5(RES/TOT)	BORON	12.6 mg/Kg	12.6U mg/Kg
SL-526-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	90.5 mg/Kg	90.5U mg/Kg
SL-526-SA7-SB-3.5-4.5(RES/TOT)	BORON	11.6 mg/Kg	11.6U mg/Kg



# Field Blank Outlier Report

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PrepPH037

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C  
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-512-SA7-SB-0.0-0.5 SL-525-SA7-SB-0.0-0.5 SL-526-SA7-SB-0.0-0.5 SL-526-SA7-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-512-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.186 mg/Kg	0.186U mg/Kg
SL-525-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.388 mg/Kg	0.388U mg/Kg
SL-526-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.354 mg/Kg	0.354U mg/Kg
SL-526-SA7-SB-3.5-4.5(RES/TOT)	MOLYBDENUM	0.528 mg/Kg	0.528U mg/Kg



# Surrogate Outlier Report

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PH037\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8082A

Matrix: SO

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
SL-512-SA7-SB-0.0 -0.5	TETRACHLORO-M-XYLENE	129	45.00-120.00	All Target Analytes	J (all detects)
SL-526-SA7-SB-0.0 -0.5	TETRACHLORO-M-XYLENE	123	45.00-120.00	All Target Analytes	J(all detects)
SL-526-SA7-SB-3.5 -4.5	TETRACHLORO-M-XYLENE	121	45.00-120.00	All Target Analytes	J(all detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PH037\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31149AQ320500A (SL-512-SA7-SB-0.0-0.5 SL-525-SA7-SB-0.0-0.5 SL-526-SA7-SB-0.0-0.5 SL-526-SA7-SB-3.5-4.5)	EFH (C30-C40)	55	-	65.00-128.00	-	EFH (C30-C40)	J (all detects) UJ (all non-detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PH037\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-512-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.84	4.99	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.796	4.99	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0704	4.99	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0741	4.99	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0849	4.99	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JQ	0.196	4.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0905	4.99	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.187	4.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0642	4.99	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0631	4.99	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.175	4.99	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0843	4.99	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0832	4.99	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0662	0.999	PQL	ng/Kg	
	OCDF	JB	1.66	9.99	PQL	ng/Kg	
SL-525-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.351	5.08	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.290	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.393	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	1.23	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.544	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.719	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.129	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.235	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	4.47	5.08	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.571	5.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.726	5.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.350	1.02	PQL	ng/Kg	
	OCDF	JB	7.98	10.2	PQL	ng/Kg	
SL-526-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.65	5.30	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.149	5.30	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.212	5.30	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.206	5.30	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.518	5.30	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.226	5.30	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.401	5.30	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.129	5.30	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.231	5.30	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.70	5.30	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.184	5.30	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.258	5.30	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0301	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0866	1.06	PQL	ng/Kg	
	OCDF	JB	2.71	10.6	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PH037\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-526-SA7-SB-3.5-4.5	1,2,3,4,6,7,8-HPCDD	JB	1.41	5.16	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.358	5.16	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0558	5.16	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0344	5.16	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.0698	5.16	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JQ	0.0768	5.16	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.0623	5.16	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.0729	5.16	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0848	5.16	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.316	5.16	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0431	5.16	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0855	5.16	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0316	1.03	PQL	ng/Kg	
	OCDF	JB	0.578	10.3	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-512-SA7-SB-0.0-0.5	ANTIMONY	J	0.627	4.06	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.556	1.02	PQL	mg/Kg	
	BORON	J	1.09	10.2	PQL	mg/Kg	
	CADMIUM	J	0.152	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.186	2.03	PQL	mg/Kg	
	SODIUM	J	63.8	102	PQL	mg/Kg	
	TIN	J	2.76	10.2	PQL	mg/Kg	
SL-525-SA7-SB-0.0-0.5	Zirconium	J	2.31	5.08	PQL	mg/Kg	J (all detects)
	ANTIMONY	J	0.545	4.09	PQL	mg/Kg	
	BERYLLIUM	J	0.510	1.02	PQL	mg/Kg	
	BORON	J	3.20	10.2	PQL	mg/Kg	
	CADMIUM	J	0.231	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.388	2.04	PQL	mg/Kg	
	SODIUM	J	67.4	102	PQL	mg/Kg	
SL-526-SA7-SB-0.0-0.5	TIN	J	2.79	10.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.29	5.11	PQL	mg/Kg	
	BERYLLIUM	J	0.629	1.08	PQL	mg/Kg	
	CADMIUM	J	0.233	1.08	PQL	mg/Kg	
	MOLYBDENUM	J	0.354	2.17	PQL	mg/Kg	
	SODIUM	J	90.5	108	PQL	mg/Kg	
	TIN	J	3.05	10.8	PQL	mg/Kg	
SL-526-SA7-SB-3.5-4.5	Zirconium	J	2.78	5.42	PQL	mg/Kg	J (all detects)
	ANTIMONY	J	0.729	4.14	PQL	mg/Kg	
	BERYLLIUM	J	0.817	1.04	PQL	mg/Kg	
	CADMIUM	J	0.0952	1.04	PQL	mg/Kg	
	MOLYBDENUM	J	0.528	2.07	PQL	mg/Kg	
	TIN	J	3.24	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.90	5.18	PQL	mg/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PH037\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-512-SA7-SB-0.0-0.5	SELENIUM	J	0.164	0.406	PQL	mg/Kg	J (all detects)
SL-525-SA7-SB-0.0-0.5	SELENIUM	J	0.182	0.409	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0696	0.204	PQL	mg/Kg	
SL-526-SA7-SB-0.0-0.5	SELENIUM	J	0.159	0.433	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0470	0.217	PQL	mg/Kg	
SL-526-SA7-SB-3.5-4.5	SELENIUM	J	0.104	0.414	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0711	0.207	PQL	mg/Kg	

**Method:** 7471B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-512-SA7-SB-0.0-0.5	MERCURY	J	0.0133	0.0162	PQL	mg/Kg	J (all detects)
SL-526-SA7-SB-0.0-0.5	MERCURY	J	0.0165	0.0178	PQL	mg/Kg	J (all detects)
SL-526-SA7-SB-3.5-4.5	MERCURY	J	0.0156	0.0174	PQL	mg/Kg	J (all detects)

**Method:** 8015M

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-0.0-0.5	EFH (C21-C30)	J	23	26	PQL	mg/Kg	J (all detects)

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-512-SA7-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.90	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.0	1.7	PQL	ug/Kg	
	PYRENE	J	0.99	1.7	PQL	ug/Kg	
SL-525-SA7-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.81	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.50	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.5	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.96	1.7	PQL	ug/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH037

Laboratory: LL

EDD Filename: PH037\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-526-SA7-SB-0.0-0.5	BENZO(A)ANTHRACENE	J	0.88	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.86	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.94	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.75	1.8	PQL	ug/Kg	
	FLUORENE	J	1.3	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.0	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	
	N-NITROSODIMETHYLAMINE	J	0.81	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	



LDC #: 29836K4

SDG #: PH037

Laboratory: Eurofins Lancaster Laboratories

## VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 6/11/13

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

**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: 4/23/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (from PH039)
VII.	Duplicate Sample Analysis	N	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	(from PH039) (Ni, P: J/US)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV.	Field Blanks	SW	EB=EB042413 FB=FB-041113 (PH038) (PH029)

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-526-SA7-SB-0.0-0.5	11		21		31	
2	SL-526-SA7-SB-3.5-4.5	12		22		32	
3	SL-512-SA7-SB-0.0-0.5	13		23		33	
4	SL-525-SA7-SB-0.0-0.5	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_



Sample Concentration units, unless otherwise noted: mg/Kg      Associated Samples: 1, 2

Analyte	Maximum PB* (mg/Kg)	Maximum PB* (ug/L)	Maximum ICB/CCB* (ug/L)	Action Level	2				
Sb			2.5	1.25	0.73				

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 #: 29836K4

# VALIDATION FINDINGS WORKSHEET

## Field Blanks

Page: 1 of 1  
Reviewer:                       
2nd Reviewer:                     

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

**Blank units:** mg/L    **Associated sample units:** mg/Kg    **Reason:** F  
**Sampling date:** EB=4/24/13    FB=4/11/13    Soil factor applied 100x  
**Field blank type:** (circle one) Field Blank / Rinsate / Other:    Associated Samples: All

Analyte		Blank ID	Blank ID	Sample Identification							
		EB-042413	FB-041113	Action Limit	1	2	3	4			
B		0.0319		15.95	12.6	11.6	1.1	3.2			
Cu			0.0036	1.8							
Mo			0.0036	1.8	0.35	0.53	0.19	0.39			
Na		0.228		114	90.5		63.8	67.4			
Sn		0.0035		1.75							

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".



## **Attachment I**

### **Sample ID Cross Reference and Data Review Level**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Apr-2013	TB-042413	7034498	TB	5030B	8015M	III
24-Apr-2013	SL-525-SA7-SB-6.5-7.5	7034499	N	3050B	6010C	III
24-Apr-2013	SL-525-SA7-SB-6.5-7.5	7034499	N	3050B	6020A	III
24-Apr-2013	SL-525-SA7-SB-6.5-7.5	7034499	N	3546	8015M	III
24-Apr-2013	SL-525-SA7-SB-6.5-7.5	7034499	N	3546	8082A	III
24-Apr-2013	SL-525-SA7-SB-6.5-7.5	7034499	N	3546	8270D SIM	III
24-Apr-2013	SL-525-SA7-SB-6.5-7.5	7034499	N	5035A	8015M	III
24-Apr-2013	SL-525-SA7-SB-6.5-7.5	7034499	N	METHOD	1613B	III
24-Apr-2013	SL-525-SA7-SB-6.5-7.5	7034499	N	METHOD	7471B	III
24-Apr-2013	SL-529-SA7-SB-0.0-0.5	7034500	N	3050B	6010C	III
24-Apr-2013	SL-529-SA7-SB-0.0-0.5	7034500	N	3050B	6020A	III
24-Apr-2013	SL-529-SA7-SB-0.0-0.5	7034500	N	3546	8015M	III
24-Apr-2013	SL-529-SA7-SB-0.0-0.5	7034500	N	3546	8082A	III
24-Apr-2013	SL-529-SA7-SB-0.0-0.5	7034500	N	3546	8270D SIM	III
24-Apr-2013	SL-529-SA7-SB-0.0-0.5	7034500	N	METHOD	1613B	III
24-Apr-2013	SL-529-SA7-SB-0.0-0.5	7034500	N	METHOD	7471B	III
24-Apr-2013	SL-528-SA7-SB-0.0-0.5	7034501	N	3050B	6010C	III
24-Apr-2013	SL-528-SA7-SB-0.0-0.5	7034501	N	3050B	6020A	III
24-Apr-2013	SL-528-SA7-SB-0.0-0.5	7034501	N	3546	8015M	III
24-Apr-2013	SL-528-SA7-SB-0.0-0.5	7034501	N	3546	8082A	III
24-Apr-2013	SL-528-SA7-SB-0.0-0.5	7034501	N	3546	8270D SIM	III
24-Apr-2013	SL-528-SA7-SB-0.0-0.5	7034501	N	METHOD	1613B	III
24-Apr-2013	SL-528-SA7-SB-0.0-0.5	7034501	N	METHOD	7471B	III
24-Apr-2013	SL-527-SA7-SB-0.0-0.5	7034502	N	3050B	6010C	III
24-Apr-2013	SL-527-SA7-SB-0.0-0.5	7034502	N	3050B	6020A	III
24-Apr-2013	SL-527-SA7-SB-0.0-0.5	7034502	N	3546	8015M	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Apr-2013	SL-527-SA7-SB-0.0-0.5	7034502	N	3546	8082A	III
24-Apr-2013	SL-527-SA7-SB-0.0-0.5	7034502	N	3546	8270D SIM	III
24-Apr-2013	SL-527-SA7-SB-0.0-0.5	7034502	N	METHOD	1613B	III
24-Apr-2013	SL-527-SA7-SB-0.0-0.5	7034502	N	METHOD	7471B	III
24-Apr-2013	SL-527-SA7-SB-2.5-3.5	7034503	N	3050B	6010C	III
24-Apr-2013	SL-527-SA7-SB-2.5-3.5	7034503	N	3050B	6020A	III
24-Apr-2013	SL-527-SA7-SB-2.5-3.5	7034503	N	3546	8015M	III
24-Apr-2013	SL-527-SA7-SB-2.5-3.5	7034503	N	3546	8082A	III
24-Apr-2013	SL-527-SA7-SB-2.5-3.5	7034503	N	3546	8270D SIM	III
24-Apr-2013	SL-527-SA7-SB-2.5-3.5	7034503	N	5035A	8015M	III
24-Apr-2013	SL-527-SA7-SB-2.5-3.5	7034503	N	METHOD	1613B	III
24-Apr-2013	SL-527-SA7-SB-2.5-3.5	7034503	N	METHOD	7471B	III
24-Apr-2013	EB-042413	7034504	EB	3005A	6010C	III
24-Apr-2013	EB-042413	7034504	EB	3510C	8015M	III
24-Apr-2013	EB-042413	7034504	EB	3510C	8081B	III
24-Apr-2013	EB-042413	7034504	EB	3510C	8082A	III
24-Apr-2013	EB-042413	7034504	EB	3510C	8270D SIM	III
24-Apr-2013	EB-042413	7034504	EB	5030B	8015M	III
24-Apr-2013	EB-042413	7034504	EB	M3010A	6020A	III
24-Apr-2013	EB-042413	7034504	EB	METHOD	1613B	III
24-Apr-2013	EB-042413	7034504	EB	METHOD	7470A	III



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: AQ

Sample ID: EB-042413

Collected: 4/24/2013 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	0.0319	J	0.0083	MDL	0.100	PQL	mg/L	J	Z
SODIUM	0.228	J	0.167	MDL	2.00	PQL	mg/L	J	Z
TIN	0.0035	J	0.0022	MDL	0.0400	PQL	mg/L	J	Z

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-525-SA7-SB-6.5-7.5

Collected: 4/24/2013 9:10:00

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.754	J	0.515	MDL	4.12	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.603	J	0.0691	MDL	1.03	PQL	mg/Kg	J	Z
BORON	10.3	J	0.856	MDL	10.3	PQL	mg/Kg	U	F
CADMIUM	0.142	J	0.0340	MDL	1.03	PQL	mg/Kg	J	Z
CALCIUM	3680		4.14	MDL	20.6	PQL	mg/Kg	J	E
COBALT	4.23		0.0928	MDL	1.03	PQL	mg/Kg	J	E
LEAD	7.48		0.485	MDL	3.09	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.641	J	0.175	MDL	2.06	PQL	mg/Kg	U	F
NICKEL	8.84		0.113	MDL	2.06	PQL	mg/Kg	J	A
PHOSPHORUS	255		0.526	MDL	10.3	PQL	mg/Kg	J	A, E
POTASSIUM	2490		13.9	MDL	103	PQL	mg/Kg	J	Q
SODIUM	84.5	J	17.2	MDL	103	PQL	mg/Kg	U	F
TIN	2.76	J	0.227	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.41	J	0.856	MDL	5.15	PQL	mg/Kg	J	Z

Sample ID: SL-527-SA7-SB-0.0-0.5

Collected: 4/24/2013 1:15:00

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.726	J	0.504	MDL	4.03	PQL	mg/Kg	J	Z, Q
ARSENIC	3.93	J	0.332	MDL	4.03	PQL	mg/Kg	J	Z
BERYLLIUM	0.569	J	0.0675	MDL	1.01	PQL	mg/Kg	J	Z
BORON	11.9		0.836	MDL	10.1	PQL	mg/Kg	U	F
CADMIUM	0.294	J	0.0332	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	3850		4.05	MDL	20.1	PQL	mg/Kg	J	E

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-527-SA7-SB-0.0-0.5

Collected: 4/24/2013 1:15:00

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.80		0.0906	MDL	1.01	PQL	mg/Kg	J	E
LEAD	13.2		0.473	MDL	3.02	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.370	J	0.171	MDL	2.01	PQL	mg/Kg	U	F
NICKEL	14.6		0.111	MDL	2.01	PQL	mg/Kg	J	A
PHOSPHORUS	437		0.514	MDL	10.1	PQL	mg/Kg	J	A, E
POTASSIUM	3590		13.6	MDL	101	PQL	mg/Kg	J	Q
SODIUM	66.6	J	16.8	MDL	101	PQL	mg/Kg	U	F
TIN	3.03	J	0.222	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.54	J	0.836	MDL	5.04	PQL	mg/Kg	J	Z

Sample ID: SL-527-SA7-SB-2.5-3.5

Collected: 4/24/2013 2:40:00

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.830	J	0.513	MDL	4.10	PQL	mg/Kg	J	Z, Q
ARSENIC	3.93	J	0.339	MDL	4.10	PQL	mg/Kg	J	Z
BERYLLIUM	0.795	J	0.0687	MDL	1.03	PQL	mg/Kg	J	Z
BORON	9.37	J	0.852	MDL	10.3	PQL	mg/Kg	U	F
CADMIUM	0.189	J	0.0339	MDL	1.03	PQL	mg/Kg	J	Z
CALCIUM	1740		4.12	MDL	20.5	PQL	mg/Kg	J	E
COBALT	7.28		0.0923	MDL	1.03	PQL	mg/Kg	J	E
LEAD	4.78		0.482	MDL	3.08	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.238	J	0.174	MDL	2.05	PQL	mg/Kg	U	F
NICKEL	13.0		0.113	MDL	2.05	PQL	mg/Kg	J	A
PHOSPHORUS	349		0.523	MDL	10.3	PQL	mg/Kg	J	A, E
POTASSIUM	2210		13.9	MDL	103	PQL	mg/Kg	J	Q
SODIUM	97.8	J	17.1	MDL	103	PQL	mg/Kg	U	F
TIN	2.90	J	0.226	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.63	J	0.852	MDL	5.13	PQL	mg/Kg	J	Z

Sample ID: SL-528-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:55:00

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.903	J	0.503	MDL	4.03	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.560	J	0.0674	MDL	1.01	PQL	mg/Kg	J	Z
BORON	10.1		0.835	MDL	10.1	PQL	mg/Kg	U	F

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-528-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:55:00

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.181	J	0.0332	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	3850		4.05	MDL	20.1	PQL	mg/Kg	J	E
COBALT	6.60		0.0906	MDL	1.01	PQL	mg/Kg	J	E
LEAD	6.10		0.473	MDL	3.02	PQL	mg/Kg	J	Q, E
MOLYBDENUM	1.49	J	0.171	MDL	2.01	PQL	mg/Kg	U	F
NICKEL	11.7		0.111	MDL	2.01	PQL	mg/Kg	J	A
PHOSPHORUS	401		0.513	MDL	10.1	PQL	mg/Kg	J	A, E
POTASSIUM	2130		13.6	MDL	101	PQL	mg/Kg	J	Q
SODIUM	55.9	J	16.8	MDL	101	PQL	mg/Kg	U	F
TIN	2.86	J	0.221	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.30	J	0.835	MDL	5.03	PQL	mg/Kg	J	Z

Sample ID: SL-529-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:00:00

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1850		13.7	MDL	102	PQL	mg/Kg	J	Q
SODIUM	45.9	J	17.0	MDL	102	PQL	mg/Kg	U	F
TIN	2.84	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.55	J	0.845	MDL	5.09	PQL	mg/Kg	J	Z

Sample ID: SL-529-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:00:00

Analysis Type: REA2/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.598	J	0.509	MDL	4.07	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.536	J	0.0682	MDL	1.02	PQL	mg/Kg	J	Z
BORON	3.76	J	0.845	MDL	10.2	PQL	mg/Kg	U	F
CADMIUM	0.151	J	0.0336	MDL	1.02	PQL	mg/Kg	J	Z
CALCIUM	2830		4.09	MDL	20.4	PQL	mg/Kg	J	E
COBALT	4.26		0.0916	MDL	1.02	PQL	mg/Kg	J	E
LEAD	8.52		0.478	MDL	3.05	PQL	mg/Kg	J	Q, E
NICKEL	9.25		0.112	MDL	2.04	PQL	mg/Kg	J	A
PHOSPHORUS	338		0.519	MDL	10.2	PQL	mg/Kg	J	A, E

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-525-SA7-SB-6.5-7.5

Collected: 4/24/2013 9:10:00

Analysis Type: REA2/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0459	J	0.0206	MDL	0.206	PQL	mg/Kg	J	Z

Sample ID: SL-527-SA7-SB-0.0-0.5

Collected: 4/24/2013 1:15:00

Analysis Type: REA2/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0447	J	0.0201	MDL	0.201	PQL	mg/Kg	J	Z

Sample ID: SL-527-SA7-SB-0.0-0.5

Collected: 4/24/2013 1:15:00

Analysis Type: REA3/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.182	J	0.101	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: SL-527-SA7-SB-2.5-3.5

Collected: 4/24/2013 2:40:00

Analysis Type: REA3/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.109	J	0.103	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-528-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:55:00

Analysis Type: REA2/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0256	J	0.0201	MDL	0.201	PQL	mg/Kg	J	Z

Sample ID: SL-528-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:55:00

Analysis Type: REA3/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.180	J	0.101	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: SL-529-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:00:00

Analysis Type: REA2/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0393	J	0.0204	MDL	0.204	PQL	mg/Kg	J	Z

Sample ID: SL-529-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:00:00

Analysis Type: REA3/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.358	J	0.102	MDL	0.407	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

**Sample ID:** SL-525-SA7-SB-6.5-7.5

**Collected:** 4/24/2013 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	0.0155	J	0.0103	MDL	0.0172	PQL	mg/Kg	J	Z

**Sample ID:** SL-528-SA7-SB-0.0-0.5

**Collected:** 4/24/2013 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
MERCURY	0.0122	J	0.0102	MDL	0.0170	PQL	mg/Kg	J	Z

**Sample ID:** SL-529-SA7-SB-0.0-0.5

**Collected:** 4/24/2013 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	0.0141	J	0.010	MDL	0.0167	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** AQ

**Sample ID:** EB-042413

**Collected:** 4/24/2013 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	0.448	JB	0.152	MDL	9.65	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.199	JBQ	0.0523	MDL	9.65	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.191	JBQ	0.0633	MDL	9.65	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.251	JB	0.0877	MDL	9.65	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.255	JB	0.0881	MDL	9.65	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.282	JBQ	0.136	MDL	9.65	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.240	JB	0.0831	MDL	9.65	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.561	JBQ	0.137	MDL	9.65	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.178	JB	0.0900	MDL	9.65	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.409	JBQ	0.152	MDL	9.65	PQL	pg/L	U	B
OCDD	0.854	JBQ	0.234	MDL	19.3	PQL	pg/L	U	B
OCDF	0.673	JBQ	0.175	MDL	19.3	PQL	pg/L	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-525-SA7-SB-6.5-7.5

Collected: 4/24/2013 9:10:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.28	JB	0.0174	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.166	JB	0.0234	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.138	J	0.0277	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.179	JBQ	0.0240	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.432	J	0.0276	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.237	JB	0.0234	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.248	JB	0.0271	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0412	JBQ	0.0250	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0676	JQ	0.0269	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.81	JB	0.0204	MDL	5.25	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.232	JB	0.0231	MDL	5.25	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.368	JB	0.0201	MDL	5.25	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0980	J	0.0371	MDL	1.05	PQL	ng/Kg	J	Z
OCDF	3.30	JB	0.0180	MDL	10.5	PQL	ng/Kg	J	Z

Sample ID: SL-527-SA7-SB-0.0-0.5

Collected: 4/24/2013 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	1.69	JB	0.0308	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.143	JB	0.0407	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.215	J	0.0381	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.209	JB	0.0261	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	0.460	J	0.0382	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.197	JB	0.0251	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.373	JB	0.0384	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0452	JB	0.0267	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.140	J	0.0328	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.254	JB	0.0245	MDL	5.17	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.206	JB	0.0247	MDL	5.17	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.433	JB	0.0245	MDL	5.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0353	JQ	0.0264	MDL	1.03	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.214	JQ	0.0470	MDL	1.03	PQL	ng/Kg	J	Z
OCDF	3.64	JB	0.0228	MDL	10.3	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-527-SA7-SB-2.5-3.5

Collected: 4/24/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.254	JB	0.0165	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0800	JB	0.0115	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0654	JBQ	0.0176	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0312	JQ	0.0173	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.0547	JBQ	0.0118	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0901	J	0.0170	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.0489	JB	0.0110	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0781	JBQ	0.0165	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.0360	JBQ	0.0134	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0809	JQ	0.0213	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.146	JBQ	0.0115	MDL	5.07	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0390	JB	0.0117	MDL	5.07	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.109	JB	0.0112	MDL	5.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0364	JQ	0.0230	MDL	1.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0271	J	0.0220	MDL	1.01	PQL	ng/Kg	J	Z
OCDD	1.67	JB	0.0178	MDL	10.1	PQL	ng/Kg	J	Z
OCDF	0.145	JB	0.0246	MDL	10.1	PQL	ng/Kg	U	B

Sample ID: SL-528-SA7-SB-0.0-0.5

Collected: 4/24/2013 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	0.988	JB	0.0139	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.247	JB	0.00962	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0394	JBQ	0.0131	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0758	JQ	0.0170	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.0558	JB	0.0126	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0704	JQ	0.0176	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.0417	JBQ	0.0120	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0866	JBQ	0.0174	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.0289	JBQ	0.0137	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0390	JQ	0.0158	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0856	JB	0.00936	MDL	4.98	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0444	JB	0.0125	MDL	4.98	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0636	JBQ	0.00892	MDL	4.98	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-528-SA7-SB-0.0-0.5

Collected: 4/24/2013 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
2,3,7,8-TCDF	0.0416	JQ	0.0191	MDL	0.996	PQL	ng/Kg	J	Z
OCDD	7.79	JB	0.0134	MDL	9.96	PQL	ng/Kg	J	Z
OCDF	0.507	JB	0.0170	MDL	9.96	PQL	ng/Kg	U	B

Sample ID: SL-529-SA7-SB-0.0-0.5

Collected: 4/24/2013 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	4.89	JB	0.0180	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.599	JB	0.0175	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0441	JBQ	0.0222	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.182	JQ	0.0248	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.0820	JB	0.0176	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	1.05	J	0.0263	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.544	JB	0.0163	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	1.43	JB	0.0256	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDF	0.0871	JB	0.0187	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.117	J	0.0213	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.103	JB	0.0120	MDL	5.04	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0783	JB	0.0167	MDL	5.04	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.141	JB	0.0112	MDL	5.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0747	JQ	0.0255	MDL	1.01	PQL	ng/Kg	J	Z
OCDF	1.07	JB	0.0157	MDL	10.1	PQL	ng/Kg	J	Z

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** AQ

Sample ID: EB-042413

Collected: 4/24/2013 3:00:00

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.58	U	0.097	MDL	0.58	PQL	mg/L	UJ	S
EFH (C15-C20)	0.58	U	0.097	MDL	0.58	PQL	mg/L	UJ	S
EFH (C21-C30)	0.58	U	0.097	MDL	0.58	PQL	mg/L	UJ	S
EFH (C30-C40)	0.58	U	0.097	MDL	0.58	PQL	mg/L	UJ	L, S
EFH (C8-C11)	0.58	U	0.097	MDL	0.58	PQL	mg/L	UJ	L, S

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8015M

Matrix: SO

Sample ID: SL-525-SA7-SB-6.5-7.5			Collected: 4/24/2013 9:10:00		Analysis Type: REA			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.4	J	2.1	MDL	5.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	81		4.2	MDL	11	PQL	mg/Kg	J	L

Sample ID: SL-527-SA7-SB-0.0-0.5			Collected: 4/24/2013 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 (C30-C40)	7.8	J	4.1	MDL	10	PQL	mg/Kg	J	Z, L

Sample ID: SL-527-SA7-SB-2.5-3.5			Collected: 4/24/2013 2:40:00		Analysis Type: REA			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	3.1	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z
EFH (C30-C40)	8.8	J	4.1	MDL	10	PQL	mg/Kg	J	Z, L

Sample ID: SL-527-SA7-SB-2.5-3.5			Collected: 4/24/2013 2:40:00		Analysis Type: RES			Dilution: 27.41	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.3	J	0.2	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-528-SA7-SB-0.0-0.5			Collected: 4/24/2013 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
EFH (C21-C30)	3.0	J	2.1	MDL	5.1	PQL	mg/Kg	J	Z
EFH (C30-C40)	8.3	J	4.1	MDL	10	PQL	mg/Kg	J	Z, L

Sample ID: SL-529-SA7-SB-0.0-0.5			Collected: 4/24/2013 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 (C21-C30)	5.0	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z
EFH (C30-C40)	11		4.2	MDL	10	PQL	mg/Kg	J	L

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 8082A

**Matrix:** SO

**Sample ID:** SL-525-SA7-SB-6.5-7.5

**Collected:** 4/24/2013 9:10:00

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	14	J	4.6	MDL	18	PQL	ug/Kg	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** AQ

**Sample ID:** EB-042413

**Collected:** 4/24/2013 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	0.011	J	0.011	MDL	0.054	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.20	J	0.054	MDL	1.1	PQL	ug/L	U	B
Diethylphthalate	0.089	J	0.054	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.15	J	0.054	MDL	1.1	PQL	ug/L	J	Z
NAPHTHALENE	0.053	J	0.033	MDL	0.054	PQL	ug/L	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

**Sample ID:** SL-525-SA7-SB-6.5-7.5

**Collected:** 4/24/2013 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-METHYLNAPHTHALENE	0.73	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.99	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.0	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.9	J	6.3	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	0.72	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.79	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	0.98	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

**Sample ID:** SL-527-SA7-SB-0.0-0.5

**Collected:** 4/24/2013 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-METHYLNAPHTHALENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.42	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-527-SA7-SB-0.0-0.5

Collected: 4/24/2013 1:15:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.90	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-527-SA7-SB-2.5-3.5

Collected: 4/24/2013 2:40:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	0.77	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-528-SA7-SB-0.0-0.5

Collected: 4/24/2013 10:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.85	J	0.68	MDL	1.7	PQL	ug/Kg	U	F

Sample ID: SL-529-SA7-SB-0.0-0.5

Collected: 4/24/2013 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-METHYLNAPHTHALENE	0.96	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.7	J	6.3	MDL	19	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.0	J	6.3	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
FLUORENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.96	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
*#	Professional Judgment
A	ICP Serial Dilution
B	Method Blank Contamination
E	Laboratory Duplicate Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Upper Estimation
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
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

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH038



# Method Blank Outlier Report

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method:</b> 1613B <b>Matrix:</b> AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1220B372025	5/3/2013 8:25:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	0.480 pg/L 0.366 pg/L 0.365 pg/L 0.249 pg/L 0.185 pg/L 0.211 pg/L 0.186 pg/L 0.197 pg/L 0.423 pg/L 0.315 pg/L 0.487 pg/L 0.377 pg/L 0.214 pg/L 0.231 pg/L 0.183 pg/L 0.631 pg/L 0.595 pg/L	EB-042413

The 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-042413(RES)	1,2,3,4,6,7,8-HPCDD	0.448 pg/L	0.448U pg/L
EB-042413(RES)	1,2,3,4,6,7,8-HPCDF	0.199 pg/L	0.199U pg/L
EB-042413(RES)	1,2,3,4,7,8,9-HPCDF	0.191 pg/L	0.191U pg/L
EB-042413(RES)	1,2,3,4,7,8-HxCDF	0.251 pg/L	0.251U pg/L
EB-042413(RES)	1,2,3,6,7,8-HxCDF	0.255 pg/L	0.255U pg/L
EB-042413(RES)	1,2,3,7,8,9-HxCDD	0.282 pg/L	0.282U pg/L
EB-042413(RES)	1,2,3,7,8,9-HxCDF	0.240 pg/L	0.240U pg/L
EB-042413(RES)	1,2,3,7,8-PECDF	0.561 pg/L	0.561U pg/L
EB-042413(RES)	2,3,4,6,7,8-HxCDF	0.178 pg/L	0.178U pg/L
EB-042413(RES)	2,3,4,7,8-PECDF	0.409 pg/L	0.409U pg/L
EB-042413(RES)	OCDD	0.854 pg/L	0.854U pg/L
EB-042413(RES)	OCDF	0.673 pg/L	0.673U pg/L

<b>Method:</b> 1613B <b>Matrix:</b> SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1200B371904	5/1/2013 7:04:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0731 ng/Kg 0.0401 ng/Kg 0.0269 ng/Kg 0.0375 ng/Kg 0.0203 ng/Kg 0.0225 ng/Kg 0.0140 ng/Kg 0.0365 ng/Kg 0.0283 ng/Kg 0.0100 ng/Kg 0.155 ng/Kg 0.107 ng/Kg	SL-525-SA7-SB-6.5-7.5 SL-527-SA7-SB-0.0-0.5 SL-527-SA7-SB-2.5-3.5 SL-528-SA7-SB-0.0-0.5 SL-529-SA7-SB-0.0-0.5

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH038

EDD Filename: PrepPH038

Laboratory: LL

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-525-SA7-SB-6.5-7.5(RES)	1,2,3,4,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-525-SA7-SB-6.5-7.5(RES)	1,2,3,7,8,9-HXCDF	0.0412 ng/Kg	0.0412U ng/Kg
SL-527-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0452 ng/Kg	0.0452U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.254 ng/Kg	0.254U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0800 ng/Kg	0.0800U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0654 ng/Kg	0.0654U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0547 ng/Kg	0.0547U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0489 ng/Kg	0.0489U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0781 ng/Kg	0.0781U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0360 ng/Kg	0.0360U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.146 ng/Kg	0.146U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0390 ng/Kg	0.0390U ng/Kg
SL-527-SA7-SB-2.5-3.5(RES)	OCDF	0.145 ng/Kg	0.145U ng/Kg
SL-528-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0394 ng/Kg	0.0394U ng/Kg
SL-528-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0558 ng/Kg	0.0558U ng/Kg
SL-528-SA7-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0417 ng/Kg	0.0417U ng/Kg
SL-528-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.0866 ng/Kg	0.0866U ng/Kg
SL-528-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0289 ng/Kg	0.0289U ng/Kg
SL-528-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0856 ng/Kg	0.0856U ng/Kg
SL-528-SA7-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0444 ng/Kg	0.0444U ng/Kg
SL-528-SA7-SB-0.0-0.5(RES)	OCDF	0.507 ng/Kg	0.507U ng/Kg
SL-529-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0441 ng/Kg	0.0441U ng/Kg
SL-529-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0820 ng/Kg	0.0820U ng/Kg
SL-529-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.103 ng/Kg	0.103U ng/Kg
SL-529-SA7-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0783 ng/Kg	0.0783U ng/Kg

Method: 6010C

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P12237AB221100	5/3/2013 11:00:00 AM	PHOSPHORUS TIN	1.44 mg/Kg 1.47 mg/Kg	SL-525-SA7-SB-6.5-7.5 SL-527-SA7-SB-0.0-0.5 SL-527-SA7-SB-2.5-3.5 SL-528-SA7-SB-0.0-0.5 SL-529-SA7-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-525-SA7-SB-6.5-7.5(REA/TOT)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-527-SA7-SB-0.0-0.5(REA/TOT)	TIN	3.03 mg/Kg	3.03U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PrepPH038

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following 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-SA7-SB-2.5-3.5(REA/TOT)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-528-SA7-SB-0.0-0.5(REA/TOT)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-529-SA7-SB-0.0-0.5(REA/TOT)	TIN	2.84 mg/Kg	2.84U mg/Kg

Method: 8270D SIM

Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI11B262311	5/6/2013 11:11:00 PM	BIS(2-ETHYLHEXYL)PHthalate	0.16 ug/L	EB-042413

*The 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-042413(RES)	BIS(2-ETHYLHEXYL)PHthalate	0.20 ug/L	1.1U ug/L



# Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-042413(RES/TOT)	4/24/2013 3:00:00 PM	BORON SODIUM TIN	0.0319 mg/L 0.228 mg/L 0.0035 mg/L	SL-525-SA7-SB-6.5-7.5 SL-527-SA7-SB-0.0-0.5 SL-527-SA7-SB-2.5-3.5 SL-528-SA7-SB-0.0-0.5 SL-529-SA7-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-525-SA7-SB-6.5-7.5(REA/TOT)	BORON	10.3 mg/Kg	10.3U mg/Kg
SL-525-SA7-SB-6.5-7.5(REA/TOT)	SODIUM	84.5 mg/Kg	84.5U mg/Kg
SL-527-SA7-SB-0.0-0.5(REA/TOT)	BORON	11.9 mg/Kg	11.9U mg/Kg
SL-527-SA7-SB-0.0-0.5(REA/TOT)	SODIUM	66.6 mg/Kg	66.6U mg/Kg
SL-527-SA7-SB-2.5-3.5(REA/TOT)	BORON	9.37 mg/Kg	9.37U mg/Kg
SL-527-SA7-SB-2.5-3.5(REA/TOT)	SODIUM	97.8 mg/Kg	97.8U mg/Kg
SL-528-SA7-SB-0.0-0.5(REA/TOT)	BORON	10.1 mg/Kg	10.1U mg/Kg
SL-528-SA7-SB-0.0-0.5(REA/TOT)	SODIUM	55.9 mg/Kg	55.9U mg/Kg
SL-529-SA7-SB-0.0-0.5(REA/TOT)	SODIUM	45.9 mg/Kg	45.9U mg/Kg
SL-529-SA7-SB-0.0-0.5(REA2/TOT)	BORON	3.76 mg/Kg	3.76U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Field Blank Outlier Report

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method: 6010C</b>				
<b>Matrix: SO</b>				
Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-525-SA7-SB-6.5-7.5 SL-527-SA7-SB-0.0-0.5 SL-527-SA7-SB-2.5-3.5 SL-528-SA7-SB-0.0-0.5 SL-529-SA7-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-525-SA7-SB-6.5-7.5(REA/TOT)	MOLYBDENUM	0.641 mg/Kg	0.641U mg/Kg
SL-527-SA7-SB-0.0-0.5(REA/TOT)	MOLYBDENUM	0.370 mg/Kg	0.370U mg/Kg
SL-527-SA7-SB-2.5-3.5(REA/TOT)	MOLYBDENUM	0.238 mg/Kg	0.238U mg/Kg
SL-528-SA7-SB-0.0-0.5(REA/TOT)	MOLYBDENUM	1.49 mg/Kg	1.49U mg/Kg

<b>Method: 8270D SIM</b>				
<b>Matrix: SO</b>				
Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(RES)	4/11/2013 3:00:00 PM	1-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate NAPHTHALENE	0.019 ug/L 0.024 ug/L 0.082 ug/L 0.18 ug/L 0.17 ug/L 0.17 ug/L	SL-525-SA7-SB-6.5-7.5 SL-527-SA7-SB-0.0-0.5 SL-527-SA7-SB-2.5-3.5 SL-528-SA7-SB-0.0-0.5 SL-529-SA7-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-528-SA7-SB-0.0-0.5(RES)	NAPHTHALENE	0.85 ug/Kg	1.7U ug/Kg



# Surrogate Outlier Report

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8015M

Matrix: AQ

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB-042413 (REA)	O-TERPHENYL	67	69.00-119.00	All Target Analytes	J (all detects) UJ (all non-detects)

Method: 8081B

Matrix: AQ

Sample ID (Analysis Type)	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB-042413	DECACHLOROBIPHENYL	137	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-527-SA7-SB-2.5-3.5	TETRACHLORO-M-XYLENE	128	45.00-120.00	All Target Analytes	J(all detects)
SL-528-SA7-SB-0.0-0.5	TETRACHLORO-M-XYLENE	126	45.00-120.00	All Target Analytes	J(all detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8081B

Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31197AQ242035A P31197AY242047A (EB-042413)	4,4'-DDT METHOXYCHLOR	135 154	149 174	45.00-134.00 46.00-134.00	- -	4,4'-DDT METHOXYCHLOR	J (all detects)

Method: 8015M

Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31206AQ322139A P31206AY322159A (EB-042413)	EFH (C30-C40) EFH (C8-C11)	64 67	67 -	70.00-130.00 70.00-130.00	- -	EFH (C30-C40) EFH (C8-C11)	J(all detects) UJ(all non-detects)

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31201AQ320351A (SL-525-SA7-SB-6.5-7.5 SL-527-SA7-SB-0.0-0.5 SL-527-SA7-SB-2.5-3.5 SL-528-SA7-SB-0.0-0.5 SL-529-SA7-SB-0.0-0.5)	EFH (C30-C40)	63	-	65.00-128.00	-	EFH (C30-C40)	J(all detects) UJ(all non-detects)



# Reporting Limit Outliers

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-042413	1,2,3,4,6,7,8-HPCDD	JB	0.448	9.65	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.199	9.65	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.191	9.65	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.251	9.65	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.255	9.65	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.282	9.65	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	0.240	9.65	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.561	9.65	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.178	9.65	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.409	9.65	PQL	pg/L	
	OCDD	JBQ	0.854	19.3	PQL	pg/L	
	OCDF	JBQ	0.673	19.3	PQL	pg/L	

Method: 6010C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-042413	BORON	J	0.0319	0.100	PQL	mg/L	J (all detects)
	SODIUM	J	0.228	2.00	PQL	mg/L	
	TIN	J	0.0035	0.0400	PQL	mg/L	

Method: 8270D SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-042413	2-METHYLNAPHTHALENE	J	0.011	0.054	PQL	ug/L	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.20	1.1	PQL	ug/L	
	Diethylphthalate	J	0.089	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.15	1.1	PQL	ug/L	
	NAPHTHALENE	J	0.053	0.054	PQL	ug/L	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-6.5-7.5	1,2,3,4,6,7,8-HPCDF	JB	2.28	5.25	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.166	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.138	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.179	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.432	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.237	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.248	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0412	5.25	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0676	5.25	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.81	5.25	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.232	5.25	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.368	5.25	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0980	1.05	PQL	ng/Kg	
	OCDF	JB	3.30	10.5	PQL	ng/Kg	
SL-527-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.69	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.143	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.215	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.209	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.460	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.197	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.373	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0452	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.140	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.254	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.206	5.17	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.433	5.17	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0353	1.03	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.214	1.03	PQL	ng/Kg	
	OCDF	JB	3.64	10.3	PQL	ng/Kg	
SL-527-SA7-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.254	5.07	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0800	5.07	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0654	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0312	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0547	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.0901	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0489	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0781	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0360	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0809	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.146	5.07	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0390	5.07	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.109	5.07	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0364	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0271	1.01	PQL	ng/Kg	
	OCDD	JB	1.67	10.1	PQL	ng/Kg	
	OCDF	JB	0.145	10.1	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-528-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	0.988	4.98	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.247	4.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0394	4.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0758	4.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.0558	4.98	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JQ	0.0704	4.98	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.0417	4.98	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0866	4.98	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0289	4.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0390	4.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0856	4.98	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0444	4.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0636	4.98	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0416	0.996	PQL	ng/Kg	
	OCDD	JB	7.79	9.96	PQL	ng/Kg	
	OCDF	JB	0.507	9.96	PQL	ng/Kg	
SL-529-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.89	5.04	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.599	5.04	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0441	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.182	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.0820	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	1.05	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.544	5.04	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	1.43	5.04	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.0871	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDD	J	0.117	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.103	5.04	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0783	5.04	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.141	5.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0747	1.01	PQL	ng/Kg	
	OCDF	JB	1.07	10.1	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-6.5-7.5	ANTIMONY	J	0.754	4.12	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.603	1.03	PQL	mg/Kg	
	CADMIUM	J	0.142	1.03	PQL	mg/Kg	
	MOLYBDENUM	J	0.641	2.06	PQL	mg/Kg	
	SODIUM	J	84.5	103	PQL	mg/Kg	
	TIN	J	2.76	10.3	PQL	mg/Kg	
	Zirconium	J	2.41	5.15	PQL	mg/Kg	
SL-527-SA7-SB-0.0-0.5	ANTIMONY	J	0.726	4.03	PQL	mg/Kg	J (all detects)
	ARSENIC	J	3.93	4.03	PQL	mg/Kg	
	BERYLLIUM	J	0.569	1.01	PQL	mg/Kg	
	CADMIUM	J	0.294	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.370	2.01	PQL	mg/Kg	
	SODIUM	J	66.6	101	PQL	mg/Kg	
	TIN	J	3.03	10.1	PQL	mg/Kg	
	Zirconium	J	2.54	5.04	PQL	mg/Kg	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-527-SA7-SB-2.5-3.5	ANTIMONY	J	0.830	4.10	PQL	mg/Kg	J (all detects)
	ARSENIC	J	3.93	4.10	PQL	mg/Kg	
	BERYLLIUM	J	0.795	1.03	PQL	mg/Kg	
	BORON	J	9.37	10.3	PQL	mg/Kg	
	CADMIUM	J	0.189	1.03	PQL	mg/Kg	
	MOLYBDENUM	J	0.238	2.05	PQL	mg/Kg	
	SODIUM	J	97.8	103	PQL	mg/Kg	
	TIN	J	2.90	10.3	PQL	mg/Kg	
	Zirconium	J	2.63	5.13	PQL	mg/Kg	
SL-528-SA7-SB-0.0-0.5	ANTIMONY	J	0.903	4.03	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.560	1.01	PQL	mg/Kg	
	CADMIUM	J	0.181	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	1.49	2.01	PQL	mg/Kg	
	SODIUM	J	55.9	101	PQL	mg/Kg	
	TIN	J	2.86	10.1	PQL	mg/Kg	
	Zirconium	J	2.30	5.03	PQL	mg/Kg	
SL-529-SA7-SB-0.0-0.5	ANTIMONY	J	0.598	4.07	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.536	1.02	PQL	mg/Kg	
	BORON	J	3.76	10.2	PQL	mg/Kg	
	CADMIUM	J	0.151	1.02	PQL	mg/Kg	
	SODIUM	J	45.9	102	PQL	mg/Kg	
	TIN	J	2.84	10.2	PQL	mg/Kg	
	Zirconium	J	1.55	5.09	PQL	mg/Kg	

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-6.5-7.5	SILVER	J	0.0459	0.206	PQL	mg/Kg	J (all detects)
SL-527-SA7-SB-0.0-0.5	SELENIUM	J	0.182	0.403	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0447	0.201	PQL	mg/Kg	
SL-527-SA7-SB-2.5-3.5	SELENIUM	J	0.109	0.410	PQL	mg/Kg	J (all detects)
SL-528-SA7-SB-0.0-0.5	SELENIUM	J	0.180	0.403	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0256	0.201	PQL	mg/Kg	
SL-529-SA7-SB-0.0-0.5	SELENIUM	J	0.358	0.407	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0393	0.204	PQL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-6.5-7.5	MERCURY	J	0.0155	0.0172	PQL	mg/Kg	J (all detects)
SL-528-SA7-SB-0.0-0.5	MERCURY	J	0.0122	0.0170	PQL	mg/Kg	J (all detects)
SL-529-SA7-SB-0.0-0.5	MERCURY	J	0.0141	0.0167	PQL	mg/Kg	J (all detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-6.5-7.5	EFH (C15-C20)	J	4.4	5.3	PQL	mg/Kg	J (all detects)
SL-527-SA7-SB-0.0-0.5	EFH (C30-C40)	J	7.8	10	PQL	mg/Kg	J (all detects)
SL-527-SA7-SB-2.5-3.5	EFH (C21-C30)	J	3.1	5.2	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	8.8	10	PQL	mg/Kg	
	GASOLINE RANGE ORGANICS (C5-C12)	J	0.3	1.1	PQL	mg/Kg	
SL-528-SA7-SB-0.0-0.5	EFH (C21-C30)	J	3.0	5.1	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	8.3	10	PQL	mg/Kg	
SL-529-SA7-SB-0.0-0.5	EFH (C21-C30)	J	5.0	5.2	PQL	mg/Kg	J (all detects)

Method: 8082A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-6.5-7.5	AROCLOR 1254	J	14	18	PQL	ug/Kg	J (all detects)

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-6.5-7.5	1-METHYLNAPHTHALENE	J	0.73	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.99	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.9	19	PQL	ug/Kg	
	CHRYSENE	J	0.72	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.79	1.8	PQL	ug/Kg	
	FLUORENE	J	0.98	1.8	PQL	ug/Kg	
SL-527-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.42	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.7	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.90	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	1.7	PQL	ug/Kg	
SL-527-SA7-SB-2.5-3.5	BENZO(K)FLUORANTHENE	J	0.77	1.7	PQL	ug/Kg	J (all detects)
SL-528-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.85	1.7	PQL	ug/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH038

Laboratory: LL

EDD Filename: PH038\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-529-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.96	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.7	19	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.0	19	PQL	ug/Kg	
	CHRYSENE	J	1.0	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	FLUORENE	J	1.1	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.7	PQL	ug/Kg	
	PYRENE	J	0.96	1.7	PQL	ug/Kg	



LDC #: 29836L4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH038

ADR

Laboratory: Eurofins Lancaster Laboratories

Date: 6/11/13

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

**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: 4/24/13
II.	ICP/MS Tune	-	
III.	Calibration	-	
IV.	Blanks	SWA	
V.	ICP Interference Check Sample (ICS) Analysis	-	
VI.	Matrix Spike Analysis	N	MS/D (from PH039)
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	(from PH039) (N; P: J/13)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	-	
XV.	Field Blanks	SW	EB=6 FB=FB-041113 (PH029)

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-525-SA7-SB-6.5-7.5	11		21		31	
2	SL-529-SA7-SB-0.0-0.5	12		22		32	
3	SL-528-SA7-SB-0.0-0.5	13		23		33	
4	SL-527-SA7-SB-0.0-0.5	14		24		34	
5	SL-527-SA7-SB-2.5-3.5	15		25		35	
6	EB-042413	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



VALIDATION FINDINGS WORKSHEET  
Field BlanksPage: 1 of 1  
Reviewer:                       
2nd Reviewer:                     

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

Blank units: mg/L Associated sample units: mg/Kg Reason: F

Sampling date: EB=4/24/13 FB=4/11/13 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Blank ID	Sample Identification				
			1	2	3	4	5
	EB-042413	FB-041113	Action Limit				
B	0.0319		15.95	10.3	3.8	10.1	11.9
Cu		0.0036	1.8				9.4
Mo		0.0036	1.8			1.5	0.37
Na	0.228		114	84.5	45.9	55.9	66.6
Sn	0.0035		1.75				97.8

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".



## **Attachment I**

### **Sample ID Cross Reference and Data Review Level**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Apr-2013	TB-042513	7036178	TB	5030B	8015M	IV
24-Apr-2013	SL-507-SA7-SB-0.0-0.5	7036177	N	3050B	6010C	IV
24-Apr-2013	SL-507-SA7-SB-0.0-0.5	7036177	N	3050B	6020A	IV
24-Apr-2013	SL-507-SA7-SB-0.0-0.5	7036177	N	3546	8015M	IV
24-Apr-2013	SL-507-SA7-SB-0.0-0.5	7036177	N	3546	8082A	IV
24-Apr-2013	SL-507-SA7-SB-0.0-0.5	7036177	N	3546	8270D SIM	IV
24-Apr-2013	SL-507-SA7-SB-0.0-0.5	7036177	N	METHOD	1613B	IV
24-Apr-2013	SL-507-SA7-SB-0.0-0.5	7036177	N	METHOD	7471B	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5	7036179	N	3050B	6010C	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5	7036179	N	3050B	6020A	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5	7036179	N	3546	8015M	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5	7036179	N	3546	8082A	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5	7036179	N	3546	8270D SIM	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5	7036179	N	METHOD	1613B	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5	7036179	N	METHOD	7471B	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MS	7036180	MS	3050B	6010C	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MS	7036180	MS	3050B	6020A	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MS	7036180	MS	3546	8015M	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MS	7036180	MS	3546	8082A	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MS	7036180	MS	3546	8270D SIM	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MS	7036180	MS	METHOD	1613B	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MS	7036180	MS	METHOD	7471B	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MSD	7036181	MSD	3050B	6010C	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MSD	7036181	MSD	3050B	6020A	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MSD	7036181	MSD	3546	8015M	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MSD	7036181	MSD	3546	8082A	IV



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MSD	7036181	MSD	3546	8270D SIM	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MSD	7036181	MSD	METHOD	1613B	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5MSD	7036181	MSD	METHOD	7471B	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5DUP	7036182	DUP	3050B	6010C	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5DUP	7036182	DUP	3050B	6020A	IV
25-Apr-2013	SL-519-SA7-SB-0.0-0.5DUP	7036182	DUP	METHOD	7471B	IV
25-Apr-2013	SL-819-SA7-SB-0.0-0.5	7036183	FD	3050B	6010C	IV
25-Apr-2013	SL-819-SA7-SB-0.0-0.5	7036183	FD	3050B	6020A	IV
25-Apr-2013	SL-819-SA7-SB-0.0-0.5	7036183	FD	3546	8015M	IV
25-Apr-2013	SL-819-SA7-SB-0.0-0.5	7036183	FD	3546	8082A	IV
25-Apr-2013	SL-819-SA7-SB-0.0-0.5	7036183	FD	3546	8270D SIM	IV
25-Apr-2013	SL-819-SA7-SB-0.0-0.5	7036183	FD	METHOD	1613B	IV
25-Apr-2013	SL-819-SA7-SB-0.0-0.5	7036183	FD	METHOD	7471B	IV
25-Apr-2013	SL-519-SA7-SB-2.0-3.0	7036184	N	3050B	6010C	IV
25-Apr-2013	SL-519-SA7-SB-2.0-3.0	7036184	N	3050B	6020A	IV
25-Apr-2013	SL-519-SA7-SB-2.0-3.0	7036184	N	3546	8015M	IV
25-Apr-2013	SL-519-SA7-SB-2.0-3.0	7036184	N	3546	8082A	IV
25-Apr-2013	SL-519-SA7-SB-2.0-3.0	7036184	N	3546	8270D SIM	IV
25-Apr-2013	SL-519-SA7-SB-2.0-3.0	7036184	N	5035A	8015M	IV
25-Apr-2013	SL-519-SA7-SB-2.0-3.0	7036184	N	METHOD	1613B	IV
25-Apr-2013	SL-519-SA7-SB-2.0-3.0	7036184	N	METHOD	7471B	IV
25-Apr-2013	SL-509-SA7-SB-0.0-0.5	7036185	N	3050B	6010C	IV
25-Apr-2013	SL-509-SA7-SB-0.0-0.5	7036185	N	3050B	6020A	IV
25-Apr-2013	SL-509-SA7-SB-0.0-0.5	7036185	N	3546	8015M	IV
25-Apr-2013	SL-509-SA7-SB-0.0-0.5	7036185	N	3546	8082A	IV
25-Apr-2013	SL-509-SA7-SB-0.0-0.5	7036185	N	3546	8270D SIM	IV



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Apr-2013	SL-509-SA7-SB-0.0-0.5	7036185	N	METHOD	1613B	IV
25-Apr-2013	SL-509-SA7-SB-0.0-0.5	7036185	N	METHOD	7471B	IV
25-Apr-2013	SL-506-SA7-SB-0.0-0.5	7036186	N	3050B	6010C	IV
25-Apr-2013	SL-506-SA7-SB-0.0-0.5	7036186	N	3050B	6020A	IV
25-Apr-2013	SL-506-SA7-SB-0.0-0.5	7036186	N	3546	8015M	IV
25-Apr-2013	SL-506-SA7-SB-0.0-0.5	7036186	N	3546	8082A	IV
25-Apr-2013	SL-506-SA7-SB-0.0-0.5	7036186	N	3546	8270D SIM	IV
25-Apr-2013	SL-506-SA7-SB-0.0-0.5	7036186	N	METHOD	1613B	IV
25-Apr-2013	SL-506-SA7-SB-0.0-0.5	7036186	N	METHOD	7471B	IV
25-Apr-2013	SL-508-SA7-SB-0.0-0.5	7036187	N	3050B	6010C	IV
25-Apr-2013	SL-508-SA7-SB-0.0-0.5	7036187	N	3050B	6020A	IV
25-Apr-2013	SL-508-SA7-SB-0.0-0.5	7036187	N	3546	8015M	IV
25-Apr-2013	SL-508-SA7-SB-0.0-0.5	7036187	N	3546	8082A	IV
25-Apr-2013	SL-508-SA7-SB-0.0-0.5	7036187	N	3546	8270D SIM	IV
25-Apr-2013	SL-508-SA7-SB-0.0-0.5	7036187	N	METHOD	1613B	IV
25-Apr-2013	SL-508-SA7-SB-0.0-0.5	7036187	N	METHOD	7471B	IV



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-506-SA7-SB-0.0-0.5

Collected: 4/25/2013 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	0.916	J	0.504	MDL	4.03	PQL	mg/Kg	J	Z, Q
ARSENIC	3.92	J	0.333	MDL	4.03	PQL	mg/Kg	J	Z
BERYLLIUM	0.573	J	0.0675	MDL	1.01	PQL	mg/Kg	J	Z
BORON	12.0		0.837	MDL	10.1	PQL	mg/Kg	U	F
CADMIUM	0.302	J	0.0333	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	3680		4.05	MDL	20.2	PQL	mg/Kg	J	E
COBALT	6.43		0.0907	MDL	1.01	PQL	mg/Kg	J	E
LEAD	8.97		0.474	MDL	3.02	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.477	J	0.171	MDL	2.02	PQL	mg/Kg	U	F
PHOSPHORUS	504		0.514	MDL	10.1	PQL	mg/Kg	J	E
POTASSIUM	4030		13.6	MDL	101	PQL	mg/Kg	J	Q
SODIUM	80.3	J	16.8	MDL	101	PQL	mg/Kg	U	F
TIN	2.86	J	0.222	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.98	J	0.837	MDL	5.04	PQL	mg/Kg	J	Z

Sample ID: SL-507-SA7-SB-0.0-0.5

Collected: 4/24/2013 3:05:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.03	U	0.504	MDL	4.03	PQL	mg/Kg	UJ	Q
BERYLLIUM	0.526	J	0.0675	MDL	1.01	PQL	mg/Kg	J	Z
BORON	10.5		0.836	MDL	10.1	PQL	mg/Kg	U	F
CADMIUM	0.256	J	0.0332	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	3810		4.05	MDL	20.1	PQL	mg/Kg	J	E
COBALT	4.48		0.0906	MDL	1.01	PQL	mg/Kg	J	E
LEAD	9.87		0.473	MDL	3.02	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.297	J	0.171	MDL	2.01	PQL	mg/Kg	U	F
PHOSPHORUS	382		0.514	MDL	10.1	PQL	mg/Kg	J	E
POTASSIUM	3260		13.6	MDL	101	PQL	mg/Kg	J	Q
SODIUM	65.0	J	16.8	MDL	101	PQL	mg/Kg	U	F
TIN	2.82	J	0.222	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.05	J	0.836	MDL	5.04	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/2/2013 11:12:59 AM

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-508-SA7-SB-0.0-0.5

Collected: 4/25/2013 1:20:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.04	J	0.491	MDL	3.93	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.429	J	0.0658	MDL	0.982	PQL	mg/Kg	J	Z
BORON	11.8		0.815	MDL	9.82	PQL	mg/Kg	U	F
CADMIUM	0.260	J	0.0324	MDL	0.982	PQL	mg/Kg	J	Z
CALCIUM	2870		3.95	MDL	19.6	PQL	mg/Kg	J	E
COBALT	8.41		0.0884	MDL	0.982	PQL	mg/Kg	J	E
LEAD	20.2		0.461	MDL	2.95	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.656	J	0.167	MDL	1.96	PQL	mg/Kg	U	F
PHOSPHORUS	448		0.501	MDL	9.82	PQL	mg/Kg	J	E
POTASSIUM	3230		13.3	MDL	98.2	PQL	mg/Kg	J	Q
SODIUM	69.7	J	16.4	MDL	98.2	PQL	mg/Kg	U	F
TIN	3.24	J	0.216	MDL	9.82	PQL	mg/Kg	U	B
Zirconium	2.34	J	0.815	MDL	4.91	PQL	mg/Kg	J	Z

Sample ID: SL-509-SA7-SB-0.0-0.5

Collected: 4/25/2013 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	0.692	J	0.507	MDL	4.06	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.486	J	0.0680	MDL	1.01	PQL	mg/Kg	J	Z
BORON	11.7		0.842	MDL	10.1	PQL	mg/Kg	U	F
CADMIUM	0.330	J	0.0335	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	4410		4.08	MDL	20.3	PQL	mg/Kg	J	E
COBALT	5.83		0.0913	MDL	1.01	PQL	mg/Kg	J	E
LEAD	17.0		0.477	MDL	3.04	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.337	J	0.173	MDL	2.03	PQL	mg/Kg	U	F
PHOSPHORUS	422		0.518	MDL	10.1	PQL	mg/Kg	J	E
POTASSIUM	2940		13.7	MDL	101	PQL	mg/Kg	J	Q
SODIUM	77.7	J	16.9	MDL	101	PQL	mg/Kg	U	F
TIN	6.56	J	0.223	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.53	J	0.842	MDL	5.07	PQL	mg/Kg	J	Z

Sample ID: SL-519-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:45:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.63		0.507	MDL	4.06	PQL	mg/Kg	J	Q, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-519-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:45:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.463	J	0.0680	MDL	1.01	PQL	mg/Kg	J	Z
BORON	15.6		0.842	MDL	10.1	PQL	mg/Kg	U	F
CADMIUM	1.19		0.0335	MDL	1.01	PQL	mg/Kg	J	FD
CALCIUM	7940		4.08	MDL	20.3	PQL	mg/Kg	J	E
COBALT	7.61		0.0913	MDL	1.01	PQL	mg/Kg	J	E, FD
LEAD	23.8		0.477	MDL	3.04	PQL	mg/Kg	J	Q, E
MOLYBDENUM	2.79		0.172	MDL	2.03	PQL	mg/Kg	J	FD
NICKEL	8.90		0.112	MDL	2.03	PQL	mg/Kg	J	A
PHOSPHORUS	679		0.517	MDL	10.1	PQL	mg/Kg	J	E, A
POTASSIUM	3090		13.7	MDL	101	PQL	mg/Kg	J	Q
SODIUM	88.9	J	16.9	MDL	101	PQL	mg/Kg	U	F
TIN	10.9		0.223	MDL	10.1	PQL	mg/Kg	J	FD
Zirconium	2.49	J	0.842	MDL	5.07	PQL	mg/Kg	J	Z

Sample ID: SL-519-SA7-SB-2.0-3.0

Collected: 4/25/2013 9:50:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.737	J	0.507	MDL	4.06	PQL	mg/Kg	J	Z, Q
ARSENIC	3.96	J	0.335	MDL	4.06	PQL	mg/Kg	J	Z
BERYLLIUM	0.506	J	0.0680	MDL	1.01	PQL	mg/Kg	J	Z
BORON	10.6		0.842	MDL	10.1	PQL	mg/Kg	U	F
CADMIUM	0.239	J	0.0335	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	3800		4.08	MDL	20.3	PQL	mg/Kg	J	E
COBALT	5.56		0.0913	MDL	1.01	PQL	mg/Kg	J	E
LEAD	7.87		0.477	MDL	3.04	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.406	J	0.173	MDL	2.03	PQL	mg/Kg	U	F
PHOSPHORUS	408		0.518	MDL	10.1	PQL	mg/Kg	J	E
POTASSIUM	2850		13.7	MDL	101	PQL	mg/Kg	J	Q
SODIUM	95.0	J	16.9	MDL	101	PQL	mg/Kg	U	F
TIN	2.54	J	0.223	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.27	J	0.842	MDL	5.07	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-819-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:50:00

Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.542	J	0.517	MDL	4.14	PQL	mg/Kg	J	Z, Q, FD
ARSENIC	4.09	J	0.341	MDL	4.14	PQL	mg/Kg	J	Z
BERYLLIUM	0.473	J	0.0693	MDL	1.03	PQL	mg/Kg	J	Z
BORON	13.7		0.859	MDL	10.3	PQL	mg/Kg	U	F
CADMIUM	0.380	J	0.0341	MDL	1.03	PQL	mg/Kg	J	Z, FD
CALCIUM	6150		4.16	MDL	20.7	PQL	mg/Kg	J	E
COBALT	4.40		0.0931	MDL	1.03	PQL	mg/Kg	J	E, FD
LEAD	15.1		0.486	MDL	3.10	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.337	J	0.176	MDL	2.07	PQL	mg/Kg	UJ	FD, F
PHOSPHORUS	515		0.528	MDL	10.3	PQL	mg/Kg	J	E
POTASSIUM	3320		14.0	MDL	103	PQL	mg/Kg	J	Q
SODIUM	84.8	J	17.3	MDL	103	PQL	mg/Kg	U	F
TIN	2.68	J	0.228	MDL	10.3	PQL	mg/Kg	UJ	B, FD
Zirconium	2.54	J	0.859	MDL	5.17	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-506-SA7-SB-0.0-0.5

Collected: 4/25/2013 11:10:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.187	J	0.101	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: SL-506-SA7-SB-0.0-0.5

Collected: 4/25/2013 11:10:00

Analysis Type: RES/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0605	J	0.0202	MDL	0.202	PQL	mg/Kg	J	Z

Sample ID: SL-507-SA7-SB-0.0-0.5

Collected: 4/24/2013 3:05:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.101	MDL	0.403	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

**Sample ID:** SL-507-SA7-SB-0.0-0.5

**Collected:** 4/24/2013 3:05:00

**Analysis Type:** RES/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0213	J	0.0201	MDL	0.201	PQL	mg/Kg	J	Z

**Sample ID:** SL-508-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 1:20:00

**Analysis Type:** REA/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.109	J	0.0982	MDL	0.393	PQL	mg/Kg	J	Z

**Sample ID:** SL-508-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 1:20:00

**Analysis Type:** RES/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0678	J	0.0196	MDL	0.196	PQL	mg/Kg	J	Z

**Sample ID:** SL-509-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 10:40:00

**Analysis Type:** REA/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.209	J	0.101	MDL	0.406	PQL	mg/Kg	J	Z

**Sample ID:** SL-509-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 10:40:00

**Analysis Type:** RES/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0409	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z

**Sample ID:** SL-519-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 8:45:00

**Analysis Type:** REA/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.189	J	0.101	MDL	0.406	PQL	mg/Kg	J	Z

**Sample ID:** SL-519-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 8:45:00

**Analysis Type:** RES/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0351	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z

**Sample ID:** SL-519-SA7-SB-2.0-3.0

**Collected:** 4/25/2013 9:50:00

**Analysis Type:** REA/TOT

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.154	J	0.101	MDL	0.406	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/2/2013 11:12:59 AM

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-519-SA7-SB-2.0-3.0

Collected: 4/25/2013 9:50:00

Analysis Type: RES/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0224	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z

Sample ID: SL-819-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:50:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.103	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-819-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:50:00

Analysis Type: RES/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0326	J	0.0207	MDL	0.207	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-506-SA7-SB-0.0-0.5

Collected: 4/25/2013 11:10:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.952	JB	0.0210	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.118	JBQ	0.0297	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.130	JBQ	0.0316	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.209	JBQ	0.0248	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.257	J	0.0329	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.171	JB	0.0231	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.290	JQ	0.0317	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.110	JB	0.0251	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0965	JBQ	0.0282	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,7,8-PCDF	0.217	JB	0.0231	MDL	5.01	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.107	JBQ	0.0239	MDL	5.01	PQL	ng/Kg	U	B
2,3,4,7,8-PCDF	0.253	JBQ	0.0226	MDL	5.01	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0231	JQ	0.0194	MDL	1.00	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.154	J	0.0353	MDL	1.00	PQL	ng/Kg	J	Z
OCDF	1.96	JB	0.0253	MDL	10.0	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-507-SA7-SB-0.0-0.5

Collected: 4/24/2013 3:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.80	JB	0.0499	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.121	JBQ	0.0683	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.144	JBQ	0.0536	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.248	JBQ	0.0419	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	0.488	JQ	0.0583	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.169	JBQ	0.0390	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.374	JQ	0.0492	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.177	JBQ	0.0438	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.304	JB	0.0337	MDL	5.05	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.167	JBQ	0.0366	MDL	5.05	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.288	JBQ	0.0331	MDL	5.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.224	JQ	0.0501	MDL	1.01	PQL	ng/Kg	J	Z
OCDF	4.63	JB	0.0572	MDL	10.1	PQL	ng/Kg	J	Z

Sample ID: SL-508-SA7-SB-0.0-0.5

Collected: 4/25/2013 1:20:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.386	JBQ	0.0423	MDL	4.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.257	JB	0.0479	MDL	4.87	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.64	JB	0.0520	MDL	4.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	0.772	J	0.0503	MDL	4.87	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.595	JB	0.0507	MDL	4.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.505	JQ	0.0452	MDL	4.87	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.190	JBQ	0.0471	MDL	4.87	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.265	JBQ	0.0728	MDL	4.87	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	2.61	JB	0.0556	MDL	4.87	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.481	JB	0.0503	MDL	4.87	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.773	JB	0.0537	MDL	4.87	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0607	J	0.0213	MDL	0.973	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.628	J	0.113	MDL	0.973	PQL	ng/Kg	J	Z

Sample ID: SL-509-SA7-SB-0.0-0.5

Collected: 4/25/2013 10:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.03	JB	0.0687	MDL	5.08	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-509-SA7-SB-0.0-0.5

Collected: 4/25/2013 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	1.80	JB	0.0536	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	2.67	JB	0.0567	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	1.26	JB	0.0530	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	3.43	J	0.0560	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8-PCDF	2.32	JB	0.0506	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HxCDF	1.34	JB	0.0556	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,7,8-PCDF	1.04	JB	0.0442	MDL	5.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0597	JQ	0.0279	MDL	1.02	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.880	J	0.0941	MDL	1.02	PQL	ng/Kg	J	Z

Sample ID: SL-519-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.91	JB	0.0437	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.344	JB	0.0554	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.276	JBQ	0.0546	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.486	JB	0.0371	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	1.02	J	0.0589	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.299	JBQ	0.0345	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.691	J	0.0528	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDF	0.114	JBQ	0.0310	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,7,8-PCDD	0.205	JBQ	0.0451	MDL	5.10	PQL	ng/Kg	U	B
1,2,3,7,8-PCDF	0.711	JB	0.0442	MDL	5.10	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HxCDF	0.303	JB	0.0353	MDL	5.10	PQL	ng/Kg	J	Z
2,3,4,7,8-PCDF	0.495	JBQ	0.0427	MDL	5.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0651	JQ	0.0276	MDL	1.02	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.365	JQ	0.0671	MDL	1.02	PQL	ng/Kg	J	Z, FD
OCDD	270	B	0.0500	MDL	10.2	PQL	ng/Kg	J	Q
OCDF	7.75	JB	0.0513	MDL	10.2	PQL	ng/Kg	J	Z, FD

Sample ID: SL-519-SA7-SB-2.0-3.0

Collected: 4/25/2013 9:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.07	JB	0.0229	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.565	JB	0.0154	MDL	5.06	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-519-SA7-SB-2.0-3.0

Collected: 4/25/2013 9:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.0915	JBQ	0.0222	MDL	5.06	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.119	JQ	0.0241	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.112	JB	0.0195	MDL	5.06	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.209	JB	0.0248	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.118	JBQ	0.0175	MDL	5.06	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.183	JB	0.0253	MDL	5.06	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0583	JBQ	0.0198	MDL	5.06	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0778	JBQ	0.0226	MDL	5.06	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.250	JBQ	0.0156	MDL	5.06	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.103	JBQ	0.0176	MDL	5.06	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.160	JBQ	0.0159	MDL	5.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.142	J	0.0309	MDL	1.01	PQL	ng/Kg	J	Z
OCDF	1.54	JB	0.0270	MDL	10.1	PQL	ng/Kg	J	Z

Sample ID: SL-819-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.38	JB	0.0395	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.298	JBQ	0.0648	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.317	JB	0.0540	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.435	JB	0.0413	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	0.728	J	0.0562	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.307	JBQ	0.0383	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.654	J	0.0537	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.108	JBQ	0.0383	MDL	5.08	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.210	JBQ	0.0444	MDL	5.08	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.577	JBQ	0.0385	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.284	JB	0.0403	MDL	5.08	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.484	JBQ	0.0363	MDL	5.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0291	JQ	0.0290	MDL	1.02	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.184	JQ	0.0703	MDL	1.02	PQL	ng/Kg	J	Z, FD
OCDF	13.7	B	0.0491	MDL	10.2	PQL	ng/Kg	J	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8015M

Matrix: SO

Sample ID: SL-506-SA7-SB-0.0-0.5

Collected: 4/25/2013 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)	2.8	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z
EFH (C30-C40)	40		4.2	MDL	10	PQL	mg/Kg	J	L

Sample ID: SL-507-SA7-SB-0.0-0.5

Collected: 4/24/2013 3:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	23		4.1	MDL	10	PQL	mg/Kg	J	L

Sample ID: SL-508-SA7-SB-0.0-0.5

Collected: 4/25/2013 1:20:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	42		4.0	MDL	10	PQL	mg/Kg	J	L

Sample ID: SL-509-SA7-SB-0.0-0.5

Collected: 4/25/2013 10:40:00

Analysis Type: RES

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	140		21	MDL	52	PQL	mg/Kg	J	L

Sample ID: SL-519-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	2.5	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z, Q, FD
EFH (C30-C40)	95		4.1	MDL	10	PQL	mg/Kg	J	L
EFH (C8-C11)	3.0	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z, Q, FD

Sample ID: SL-519-SA7-SB-2.0-3.0

Collected: 4/25/2013 9:50:00

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	51		4.1	MDL	10	PQL	mg/Kg	J	L

Sample ID: SL-819-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	5.2	U	2.1	MDL	5.2	PQL	mg/Kg	UJ	FD
EFH (C30-C40)	79		4.2	MDL	10	PQL	mg/Kg	J	L
EFH (C8-C11)	5.2	U	2.1	MDL	5.2	PQL	mg/Kg	UJ	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

**Method Category:** SVOA

**Method:** 8082A

**Matrix:** SO

**Sample ID:** SL-506-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 11:10:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5442	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5460	34	U	10	MDL	34	PQL	ug/Kg	UJ	E

**Sample ID:** SL-507-SA7-SB-0.0-0.5

**Collected:** 4/24/2013 3:05:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5442	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5460	34	U	10	MDL	34	PQL	ug/Kg	UJ	E

**Sample ID:** SL-508-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 1:20:00

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	110		4.4	MDL	17	PQL	ug/Kg	J	S
Aroclor 5432	33	U	9.9	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5442	33	U	9.9	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5460	49		9.9	MDL	33	PQL	ug/Kg	J	S, E

**Sample ID:** SL-509-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 10:40:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5442	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5460	57		10	MDL	34	PQL	ug/Kg	J	E

**Sample ID:** SL-519-SA7-SB-0.0-0.5

**Collected:** 4/25/2013 8:45:00

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	7.0	J	4.4	MDL	17	PQL	ug/Kg	J	Z
Aroclor 5432	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5442	33	U	10	MDL	33	PQL	ug/Kg	UJ	E

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/2/2013 11:13:00 AM

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# Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8082A

Matrix: SO

Sample ID: SL-519-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	33	U	10	MDL	33	PQL	ug/Kg	UJ	E

Sample ID: SL-519-SA7-SB-2.0-3.0

Collected: 4/25/2013 9:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5442	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5460	34	U	10	MDL	34	PQL	ug/Kg	UJ	E

Sample ID: SL-819-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:50:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	6.1	J	4.5	MDL	17	PQL	ug/Kg	J	Z
Aroclor 5432	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5442	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5460	34	U	10	MDL	34	PQL	ug/Kg	UJ	E

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-506-SA7-SB-0.0-0.5

Collected: 4/25/2013 11:10:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.81	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.41	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.71	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.82	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.8	J	6.2	MDL	19	PQL	ug/Kg	J	Z
Butylbenzylphthalate	17	J	6.2	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-507-SA7-SB-0.0-0.5

Collected: 4/24/2013 3:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.84	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-507-SA7-SB-0.0-0.5

Collected: 4/24/2013 3:05:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.94	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.9	J	6.2	MDL	19	PQL	ug/Kg	J	Z
Butylbenzylphthalate	14	J	6.2	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.84	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.97	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-508-SA7-SB-0.0-0.5

Collected: 4/25/2013 1:20:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.75	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.0	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.64	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(E)PYRENE	7.4	J	3.4	MDL	17	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.9	J	6.1	MDL	18	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-509-SA7-SB-0.0-0.5

Collected: 4/25/2013 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-METHYLNAPHTHALENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.46	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.60	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(E)PYRENE	4.5	J	3.4	MDL	18	PQL	ug/Kg	J	Z
Butylbenzylphthalate	17	J	6.2	MDL	19	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-519-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.88	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-519-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:45:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.39	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, FD
ANTHRACENE	0.52	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	4.5		0.68	MDL	1.7	PQL	ug/Kg	J	Q, Q
BENZO(A)PYRENE	5.0		0.68	MDL	1.7	PQL	ug/Kg	J	Q, Q, FD
BENZO(B)FLUORANTHENE	13		0.68	MDL	1.7	PQL	ug/Kg	J	Q, Q, FD
BENZO(E)PYRENE	5.5	J	3.4	MDL	17	PQL	ug/Kg	J	Z, Q, FD
BENZO(G,H,I)PERYLENE	2.8		0.68	MDL	1.7	PQL	ug/Kg	J	Q, FD
BENZO(K)FLUORANTHENE	9.1		0.68	MDL	1.7	PQL	ug/Kg	J	FD
CHRYSENE	9.0		0.34	MDL	1.7	PQL	ug/Kg	J	Q, Q, FD
DIBENZO(A,H)ANTHRACENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	9.1		0.68	MDL	1.7	PQL	ug/Kg	J	Q, Q
INDENO(1,2,3-CD)PYRENE	2.5		0.68	MDL	1.7	PQL	ug/Kg	J	Q, FD
NAPHTHALENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	7.9		0.68	MDL	1.7	PQL	ug/Kg	J	Q, Q

Sample ID: SL-519-SA7-SB-2.0-3.0

Collected: 4/25/2013 9:50:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.96	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	0.68	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(E)PYRENE	4.1	J	3.4	MDL	18	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.2	MDL	19	PQL	ug/Kg	J	Z
NAPHTHALENE	0.95	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-819-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.7	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	FD
ANTHRACENE	0.59	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	2.7		0.70	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	5.9		0.70	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(E)PYRENE	18	U	3.5	MDL	18	PQL	ug/Kg	UJ	FD
BENZO(G,H,I)PERYLENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	2.4		0.70	MDL	1.7	PQL	ug/Kg	J	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-819-SA7-SB-0.0-0.5

Collected: 4/25/2013 8:50:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.3	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	5.0		0.35	MDL	1.7	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	1.7	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
<b>*#</b>	Professional Judgment
A	ICP Serial Dilution
B	Method Blank Contamination
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Field Blank Contamination
FD	Field Duplicate Precision
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
Q	Laboratory 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 Upper Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH039



# Method Blank Outlier Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B Matrix: SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1230B372212	5/6/2013 10:12:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0789 ng/Kg 0.0301 ng/Kg 0.0373 ng/Kg 0.0263 ng/Kg 0.0360 ng/Kg 0.0277 ng/Kg 0.0157 ng/Kg 0.0477 ng/Kg 0.0390 ng/Kg 0.0328 ng/Kg 0.0517 ng/Kg 0.143 ng/Kg 0.125 ng/Kg	SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5
BLK1280B371731	5/9/2013 5:31:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0475 ng/Kg 0.0382 ng/Kg 0.0528 ng/Kg 0.0342 ng/Kg 0.0224 ng/Kg 0.0236 ng/Kg 0.0332 ng/Kg 0.0403 ng/Kg 0.0260 ng/Kg 0.0349 ng/Kg 0.0367 ng/Kg 0.0209 ng/Kg 0.242 ng/Kg 0.136 ng/Kg	SL-519-SA7-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-506-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.118 ng/Kg	0.118U ng/Kg
SL-506-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.130 ng/Kg	0.130U ng/Kg
SL-506-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0965 ng/Kg	0.0965U ng/Kg
SL-506-SA7-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.107 ng/Kg	0.107U ng/Kg
SL-506-SA7-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.253 ng/Kg	0.253U ng/Kg
SL-507-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.121 ng/Kg	0.121U ng/Kg
SL-507-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.177 ng/Kg	0.177U ng/Kg
SL-519-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.205 ng/Kg	0.205U ng/Kg
SL-519-SA7-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0915 ng/Kg	0.0915U ng/Kg
SL-519-SA7-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDF	0.112 ng/Kg	0.112U ng/Kg
SL-519-SA7-SB-2.0-3.0(RES)	1,2,3,6,7,8-HxCDF	0.118 ng/Kg	0.118U ng/Kg
SL-519-SA7-SB-2.0-3.0(RES)	1,2,3,7,8,9-HxCDF	0.0583 ng/Kg	0.0583U ng/Kg
SL-519-SA7-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0778 ng/Kg	0.0778U ng/Kg
SL-519-SA7-SB-2.0-3.0(RES)	2,3,4,6,7,8-HxCDF	0.103 ng/Kg	0.103U ng/Kg
SL-819-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.210 ng/Kg	0.210U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/1/2013 1:38:42 PM

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method: 6010C</b>				
<b>Matrix: SO</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P12237AB221100	5/3/2013 11:00:00 AM	PHOSPHORUS TIN	1.44 mg/Kg 1.47 mg/Kg	SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-819-SA7-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-506-SA7-SB-0.0-0.5(RES/TOT)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-507-SA7-SB-0.0-0.5(RES/TOT)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-508-SA7-SB-0.0-0.5(RES/TOT)	TIN	3.24 mg/Kg	3.24U mg/Kg
SL-509-SA7-SB-0.0-0.5(RES/TOT)	TIN	6.56 mg/Kg	6.56U mg/Kg
SL-519-SA7-SB-2.0-3.0(RES/TOT)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-819-SA7-SB-0.0-0.5(RES/TOT)	TIN	2.68 mg/Kg	2.68U mg/Kg



# Field Blank Outlier Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PrepPH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-819-SA7-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-506-SA7-SB-0.0-0.5(RES/TOT)	BORON	12.0 mg/Kg	12.0U mg/Kg
SL-506-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.477 mg/Kg	0.477U mg/Kg
SL-506-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	80.3 mg/Kg	80.3U mg/Kg
SL-507-SA7-SB-0.0-0.5(RES/TOT)	BORON	10.5 mg/Kg	10.5U mg/Kg
SL-507-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.297 mg/Kg	0.297U mg/Kg
SL-507-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	65.0 mg/Kg	65.0U mg/Kg
SL-508-SA7-SB-0.0-0.5(RES/TOT)	BORON	11.8 mg/Kg	11.8U mg/Kg
SL-508-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.656 mg/Kg	0.656U mg/Kg
SL-508-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	69.7 mg/Kg	69.7U mg/Kg
SL-509-SA7-SB-0.0-0.5(RES/TOT)	BORON	11.7 mg/Kg	11.7U mg/Kg
SL-509-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.337 mg/Kg	0.337U mg/Kg
SL-509-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	77.7 mg/Kg	77.7U mg/Kg
SL-519-SA7-SB-0.0-0.5(RES/TOT)	BORON	15.6 mg/Kg	15.6U mg/Kg
SL-519-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	88.9 mg/Kg	88.9U mg/Kg
SL-519-SA7-SB-2.0-3.0(RES/TOT)	BORON	10.6 mg/Kg	10.6U mg/Kg
SL-519-SA7-SB-2.0-3.0(RES/TOT)	MOLYBDENUM	0.406 mg/Kg	0.406U mg/Kg
SL-519-SA7-SB-2.0-3.0(RES/TOT)	SODIUM	95.0 mg/Kg	95.0U mg/Kg
SL-819-SA7-SB-0.0-0.5(RES/TOT)	BORON	13.7 mg/Kg	13.7U mg/Kg
SL-819-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.337 mg/Kg	0.337U mg/Kg
SL-819-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	84.8 mg/Kg	84.8U mg/Kg

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# Surrogate Outlier Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8082A

Matrix: SO

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
SL-507-SA7-SB-0.0 -0.5	TETRACHLORO-M-XYLENE	126	45.00-120.00	All Target Analytes	J (all detects)
SL-508-SA7-SB-0.0 -0.5	TETRACHLORO-M-XYLENE	124	45.00-120.00	All Target Analytes	J(all detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8270D SIM

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-519-SA7-SB-0.0-0.5MS SL-519-SA7-SB-0.0-0.5MSD (SL-519-SA7-SB-0.0-0.5)	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(E)PYRENE BENZO(G,H,I)PERYLENE CHRYSENE FLUORANTHENE INDENO(1,2,3-CD)PYRENE PYRENE	159 143 163 - - 163 205 - 195	- - - - - - - -	32.00-135.00 36.00-138.00 26.00-142.00 70.00-130.00 33.00-141.00 29.00-148.00 47.00-135.00 17.00-136.00 26.00-143.00	55 (30.00) 45 (30.00) 43 (30.00) 31 (30.00) 35 (30.00) 55 (30.00) 70 (30.00) 32 (30.00) 75 (30.00)	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(E)PYRENE BENZO(G,H,I)PERYLENE CHRYSENE FLUORANTHENE INDENO(1,2,3-CD)PYRENE PYRENE	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-519-SA7-SB-0.0-0.5MS (TOT) SL-519-SA7-SB-0.0-0.5MSD (TOT) (SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-819-SA7-SB-0.0-0.5)	ALUMINUM IRON MAGNESIUM POTASSIUM TITANIUM	1523 1009 264 129 315	1646 1510 282 135 362	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MAGNESIUM POTASSIUM TITANIUM	J(all detects)  Al, Fe, Mg, Ti, No Qual, >4x
SL-519-SA7-SB-0.0-0.5MS (TOT) SL-519-SA7-SB-0.0-0.5MSD (TOT) (SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-819-SA7-SB-0.0-0.5)	CALCIUM PHOSPHORUS	275 -28	-53 -49	75.00-125.00 75.00-125.00	- -	CALCIUM PHOSPHORUS	No Qual, >4x
SL-519-SA7-SB-0.0-0.5MS (TOT) SL-519-SA7-SB-0.0-0.5MSD (TOT) (SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-819-SA7-SB-0.0-0.5)	ANTIMONY LEAD MANGANESE	57 50 37	57 44 41	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ANTIMONY LEAD MANGANESE	J(all detects) UJ(all non-detects)  Mn, No Qual, >4x

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# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6020A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-519-SA7-SB-0.0-0.5MS (TOT) (SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-819-SA7-SB-0.0-0.5)	STRONTIUM	39	-	75.00-125.00	-	STRONTIUM	No Qual, >4x

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-519-SA7-SB-0.0-0.5MS SL-519-SA7-SB-0.0-0.5MSD (SL-519-SA7-SB-0.0-0.5)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	147 418 1125 406 140	137 352 986 755 151	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	- - - - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	J(all detects) EFH (C15-C20), EFH (C21-C30), EFH (C30-C40), No Qual, >4x

Method: 1613B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-519-SA7-SB-0.0-0.5MS (SL-519-SA7-SB-0.0-0.5)	OCDD	30	-	40.00-135.00	-	OCDD	J(all detects) UJ(all non-detects)



# Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 160.3M

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-519-SA7-SB-0.0-0.5DUP (SL-507-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5)	MOISTURE	28		

Method: 6010C

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-519-SA7-SB-0.0-0.5DUP (TOT)	ANTIMONY	200	20.00	J(all detects) UJ(all non-detects)
(SL-506-SA7-SB-0.0-0.5	CADMIUM	124	20.00	
SL-507-SA7-SB-0.0-0.5	CALCIUM	26	20.00	
SL-508-SA7-SB-0.0-0.5	COBALT	63	20.00	
SL-509-SA7-SB-0.0-0.5	LEAD	54	20.00	Sb, Cd, Mo, Sn, No Qual, OK by Difference
SL-519-SA7-SB-0.0-0.5	MOLYBDENUM	155	20.00	
SL-519-SA7-SB-2.0-3.0	PHOSPHORUS	36	20.00	
SL-819-SA7-SB-0.0-0.5)	TIN	119	20.00	

Method: 6020A

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-519-SA7-SB-0.0-0.5DUP (TOT)	SILVER	33	20.00	No Qual, OK by Difference
(SL-506-SA7-SB-0.0-0.5				
SL-507-SA7-SB-0.0-0.5				
SL-508-SA7-SB-0.0-0.5				
SL-509-SA7-SB-0.0-0.5				
SL-519-SA7-SB-0.0-0.5				
SL-519-SA7-SB-2.0-3.0 SL-819-SA7-SB-0.0-0.5)				

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method: 8015M**

**Matrix: SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31201AQ320351A (SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-819-SA7-SB-0.0-0.5)	EFH (C30-C40)	63	-	65.00-128.00	-	EFH (C30-C40)	J (all detects) UJ (all non-detects)

**Method: 8082A**

**Matrix: SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31207AY240140A (SL-506-SA7-SB-0.0-0.5 SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-819-SA7-SB-0.0-0.5)	Aroclor 5442	-	-	36.00-106.00	40 (30.00)	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects) UJ(all non-detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Field Duplicate RPD Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 160.3M

Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
MOISTURE	2.4	4.3	57		No Qualifiers Applied

Method: 1613B

Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
1,2,3,4,6,7,8-HPCDD	25.2	17.1	38	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	2.91	3.38	15	50.00	
1,2,3,4,7,8,9-HPCDF	0.344	0.298	14	50.00	
1,2,3,4,7,8-HxCDD	0.276	0.317	14	50.00	
1,2,3,4,7,8-HxCDF	0.486	0.435	11	50.00	
1,2,3,6,7,8-HxCDD	1.02	0.728	33	50.00	
1,2,3,6,7,8-HxCDF	0.299	0.307	3	50.00	
1,2,3,7,8,9-HxCDD	0.691	0.654	6	50.00	
1,2,3,7,8,9-HxCDF	0.114	0.108	5	50.00	
1,2,3,7,8-PECDD	0.205	0.210	2	50.00	
1,2,3,7,8-PECDF	0.711	0.577	21	50.00	
2,3,4,6,7,8-HxCDF	0.303	0.284	6	50.00	
2,3,4,7,8-PECDF	0.495	0.484	2	50.00	
OCDD	270	174	43	50.00	
2,3,7,8-TCDD	0.0651	0.0291	76	50.00	J(all detects)
2,3,7,8-TCDF	0.365	0.184	66	50.00	
OCDF	7.75	13.7	55	50.00	

Method: 6010C

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5 (TOT)	SL-819-SA7-SB-0.0-0.5 (TOT)			
ALUMINUM	11700	12000	3	50.00	No Qualifiers Applied
ARSENIC	4.45	4.09	8	50.00	
BARIUM	104	107	3	50.00	
BERYLLIUM	0.463	0.473	2	50.00	
BORON	15.6	13.7	13	50.00	
CALCIUM	7940	6150	25	50.00	
CHROMIUM	15.4	17.0	10	50.00	
COPPER	12.3	12.0	2	50.00	
IRON	17900	18500	3	50.00	
LEAD	23.8	15.1	45	50.00	
LITHIUM	20.2	19.6	3	50.00	
MAGNESIUM	4490	4550	1	50.00	
MANGANESE	355	328	8	50.00	
NICKEL	8.90	10.1	13	50.00	
PHOSPHORUS	679	515	27	50.00	
POTASSIUM	3090	3320	7	50.00	
SODIUM	88.9	84.8	5	50.00	
TITANIUM	977	1040	6	50.00	
VANADIUM	29.3	30.2	3	50.00	
ZINC	71.0	69.5	2	50.00	
Zirconium	2.49	2.54	2	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Field Duplicate RPD Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

ANTIMONY	4.63	0.542	158	50.00	J(all detects)
CADMIUM	1.19	0.380	103	50.00	
COBALT	7.61	4.40	53	50.00	
MOLYBDENUM	2.79	0.337	157	50.00	
TIN	10.9	2.68	121	50.00	

Method: 6020A

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5 (TOT)	SL-819-SA7-SB-0.0-0.5 (TOT)			
SELENIUM	0.189	0.139	30	50.00	No Qualifiers Applied
SILVER	0.0351	0.0326	7	50.00	
STRONTIUM	37.5	36.6	2	50.00	
THALLIUM	0.230	0.259	12	50.00	

Method: 7471B

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5 (TOT)	SL-819-SA7-SB-0.0-0.5 (TOT)			
MERCURY	0.0581	0.0492	17	50.00	No Qualifiers Applied

Method: 8015M

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
EFH (C15-C20)	14	14	0	50.00	No Qualifiers Applied
EFH (C21-C30)	41	56	31	50.00	
EFH (C30-C40)	95	79	18	50.00	
EFH (C12-C14)	2.5	5.2 U	200	50.00	J(all detects) UJ(all non-detects)
EFH (C8-C11)	3.0	5.2 U	200	50.00	

Method: 8082A

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
AROCLOR 1254	7.0	6.1	14	50.00	No Qualifiers Applied



## Field Duplicate RPD Report

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8270D SIM

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
1-METHYLNAPHTHALENE	0.88	1.1	22	50.00	No Qualifiers Applied
2-METHYLNAPHTHALENE	1.5	1.8	18	50.00	
ANTHRACENE	0.52	0.59	13	50.00	
BENZO(A)ANTHRACENE	4.5	2.8	47	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	21	14	40	50.00	
FLUORANTHENE	9.1	5.8	44	50.00	
FLUORENE	3.9	3.5	11	50.00	
NAPHTHALENE	1.5	2.1	33	50.00	
PHENANTHRENE	3.1	3.3	6	50.00	
PYRENE	7.9	5.0	45	50.00	
ACENAPHTHYLENE	0.39	1.7 U	200	50.00	J(all detects) UJ(all non-detects)
BENZO(A)PYRENE	5.0	2.7	60	50.00	
BENZO(B)FLUORANTHENE	13	5.9	75	50.00	
BENZO(E)PYRENE	5.5	18 U	200	50.00	
BENZO(G,H,I)PERYLENE	2.8	1.4	67	50.00	
BENZO(K)FLUORANTHENE	9.1	2.4	117	50.00	
CHRYSENE	9.0	5.0	57	50.00	
DIBENZO(A,H)ANTHRACENE	1.0	1.7 U	200	50.00	
INDENO(1,2,3-CD)PYRENE	2.5	1.4	56	50.00	

Method: 9045M

Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
PH	7.32	7.59	4	50.00	No Qualifiers Applied



# Reporting Limit Outliers

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-506-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.952	5.01	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.118	5.01	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.130	5.01	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.209	5.01	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.257	5.01	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.171	5.01	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.290	5.01	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.110	5.01	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0965	5.01	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.217	5.01	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.107	5.01	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.253	5.01	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0231	1.00	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.154	1.00	PQL	ng/Kg	
	OCDF	JB	1.96	10.0	PQL	ng/Kg	
SL-507-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.80	5.05	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.121	5.05	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.144	5.05	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.248	5.05	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.488	5.05	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.169	5.05	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.374	5.05	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.177	5.05	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.304	5.05	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.167	5.05	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.288	5.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.224	1.01	PQL	ng/Kg	
	OCDF	JB	4.63	10.1	PQL	ng/Kg	
SL-508-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	0.386	4.87	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.257	4.87	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.64	4.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.772	4.87	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.595	4.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.505	4.87	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.190	4.87	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.265	4.87	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.61	4.87	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.481	4.87	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.773	4.87	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0607	0.973	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.628	0.973	PQL	ng/Kg	
SL-509-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.03	5.08	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.80	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.67	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.26	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	3.43	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.32	5.08	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.34	5.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.04	5.08	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0597	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.880	1.02	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-519-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.91	5.10	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.344	5.10	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.276	5.10	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.486	5.10	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	1.02	5.10	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.299	5.10	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	J	0.691	5.10	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.114	5.10	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.205	5.10	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.711	5.10	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.303	5.10	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.495	5.10	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0651	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.365	1.02	PQL	ng/Kg	
	OCDF	JB	7.75	10.2	PQL	ng/Kg	
SL-519-SA7-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	4.07	5.06	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.565	5.06	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0915	5.06	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.119	5.06	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.112	5.06	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.209	5.06	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.118	5.06	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.183	5.06	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0583	5.06	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0778	5.06	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.250	5.06	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.103	5.06	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.160	5.06	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.142	1.01	PQL	ng/Kg	
	OCDF	JB	1.54	10.1	PQL	ng/Kg	
SL-819-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.38	5.08	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.298	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.317	5.08	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.435	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.728	5.08	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.307	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	J	0.654	5.08	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.108	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.210	5.08	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.577	5.08	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.284	5.08	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.484	5.08	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0291	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.184	1.02	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-506-SA7-SB-0.0-0.5	ANTIMONY	J	0.916	4.03	PQL	mg/Kg	J (all detects)
	ARSENIC	J	3.92	4.03	PQL	mg/Kg	
	BERYLLIUM	J	0.573	1.01	PQL	mg/Kg	
	CADMIUM	J	0.302	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.477	2.02	PQL	mg/Kg	
	SODIUM	J	80.3	101	PQL	mg/Kg	
	TIN	J	2.86	10.1	PQL	mg/Kg	
SL-507-SA7-SB-0.0-0.5	Zirconium	J	2.98	5.04	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.526	1.01	PQL	mg/Kg	
	CADMIUM	J	0.256	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.297	2.01	PQL	mg/Kg	
	SODIUM	J	65.0	101	PQL	mg/Kg	
	TIN	J	2.82	10.1	PQL	mg/Kg	
	Zirconium	J	2.05	5.04	PQL	mg/Kg	
SL-508-SA7-SB-0.0-0.5	ANTIMONY	J	1.04	3.93	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.429	0.982	PQL	mg/Kg	
	CADMIUM	J	0.260	0.982	PQL	mg/Kg	
	MOLYBDENUM	J	0.656	1.96	PQL	mg/Kg	
	SODIUM	J	69.7	98.2	PQL	mg/Kg	
	TIN	J	3.24	9.82	PQL	mg/Kg	
	Zirconium	J	2.34	4.91	PQL	mg/Kg	
SL-509-SA7-SB-0.0-0.5	ANTIMONY	J	0.692	4.06	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.486	1.01	PQL	mg/Kg	
	CADMIUM	J	0.330	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.337	2.03	PQL	mg/Kg	
	SODIUM	J	77.7	101	PQL	mg/Kg	
	TIN	J	6.56	10.1	PQL	mg/Kg	
	Zirconium	J	2.53	5.07	PQL	mg/Kg	
SL-519-SA7-SB-0.0-0.5	BERYLLIUM	J	0.463	1.01	PQL	mg/Kg	J (all detects)
	SODIUM	J	88.9	101	PQL	mg/Kg	
	Zirconium	J	2.49	5.07	PQL	mg/Kg	
SL-519-SA7-SB-2.0-3.0	ANTIMONY	J	0.737	4.06	PQL	mg/Kg	J (all detects)
	ARSENIC	J	3.96	4.06	PQL	mg/Kg	
	BERYLLIUM	J	0.506	1.01	PQL	mg/Kg	
	CADMIUM	J	0.239	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.406	2.03	PQL	mg/Kg	
	SODIUM	J	95.0	101	PQL	mg/Kg	
	TIN	J	2.54	10.1	PQL	mg/Kg	
SL-819-SA7-SB-0.0-0.5	Zirconium	J	2.27	5.07	PQL	mg/Kg	
	ANTIMONY	J	0.542	4.14	PQL	mg/Kg	J (all detects)
	ARSENIC	J	4.09	4.14	PQL	mg/Kg	
	BERYLLIUM	J	0.473	1.03	PQL	mg/Kg	
	CADMIUM	J	0.380	1.03	PQL	mg/Kg	
	MOLYBDENUM	J	0.337	2.07	PQL	mg/Kg	
	SODIUM	J	84.8	103	PQL	mg/Kg	
	TIN	J	2.68	10.3	PQL	mg/Kg	
	Zirconium	J	2.54	5.17	PQL	mg/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-506-SA7-SB-0.0-0.5	SELENIUM SILVER	J	0.187	0.403	PQL	mg/Kg	J (all detects)
		J	0.0605	0.202	PQL	mg/Kg	
SL-507-SA7-SB-0.0-0.5	SELENIUM SILVER	J	0.159	0.403	PQL	mg/Kg	J (all detects)
		J	0.0213	0.201	PQL	mg/Kg	
SL-508-SA7-SB-0.0-0.5	SELENIUM SILVER	J	0.109	0.393	PQL	mg/Kg	J (all detects)
		J	0.0678	0.196	PQL	mg/Kg	
SL-509-SA7-SB-0.0-0.5	SELENIUM SILVER	J	0.209	0.406	PQL	mg/Kg	J (all detects)
		J	0.0409	0.203	PQL	mg/Kg	
SL-519-SA7-SB-0.0-0.5	SELENIUM SILVER	J	0.189	0.406	PQL	mg/Kg	J (all detects)
		J	0.0351	0.203	PQL	mg/Kg	
SL-519-SA7-SB-2.0-3.0	SELENIUM SILVER	J	0.154	0.406	PQL	mg/Kg	J (all detects)
		J	0.0224	0.203	PQL	mg/Kg	
SL-819-SA7-SB-0.0-0.5	SELENIUM SILVER	J	0.139	0.414	PQL	mg/Kg	J (all detects)
		J	0.0326	0.207	PQL	mg/Kg	

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-506-SA7-SB-0.0-0.5	EFH (C15-C20)	J	2.8	5.2	PQL	mg/Kg	J (all detects)
SL-519-SA7-SB-0.0-0.5	EFH (C12-C14)	J	2.5	5.1	PQL	mg/Kg	J (all detects)
	EFH (C8-C11)	J	3.0	5.1	PQL	mg/Kg	

Method: 8082A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-519-SA7-SB-0.0-0.5	AROCLOR 1254	J	7.0	17	PQL	ug/Kg	J (all detects)
SL-819-SA7-SB-0.0-0.5	AROCLOR 1254	J	6.1	17	PQL	ug/Kg	J (all detects)

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-506-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.81	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.2	1.7	PQL	ug/Kg	
	ANTHRACENE	J	0.41	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.71	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.82	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.8	19	PQL	ug/Kg	
	Butylbenzylphthalate	J	17	19	PQL	ug/Kg	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH039

Laboratory: LL

EDD Filename: PH039\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.84	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.94	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.9	19	PQL	ug/Kg	
	Butylbenzylphthalate	J	14	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.84	1.7	PQL	ug/Kg	
SL-508-SA7-SB-0.0-0.5	NAPHTHALENE	J	0.97	1.7	PQL	ug/Kg	J (all detects)
	1-METHYLNAPHTHALENE	J	0.75	1.7	PQL	ug/Kg	
	2-METHYLNAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.0	1.7	PQL	ug/Kg	
	ANTHRACENE	J	0.64	1.7	PQL	ug/Kg	
	BENZO(E)PYRENE	J	7.4	17	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.9	18	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	1.7	PQL	ug/Kg	
SL-509-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.46	1.7	PQL	ug/Kg	
	ANTHRACENE	J	0.60	1.7	PQL	ug/Kg	
	BENZO(E)PYRENE	J	4.5	18	PQL	ug/Kg	
	Butylbenzylphthalate	J	17	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	
SL-519-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.88	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.5	1.7	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.39	1.7	PQL	ug/Kg	
	ANTHRACENE	J	0.52	1.7	PQL	ug/Kg	
	BENZO(E)PYRENE	J	5.5	17	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.7	PQL	ug/Kg	
SL-519-SA7-SB-2.0-3.0	2-METHYLNAPHTHALENE	J	0.96	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.68	1.7	PQL	ug/Kg	
	BENZO(E)PYRENE	J	4.1	18	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	19	PQL	ug/Kg	
	NAPHTHALENE	J	0.95	1.7	PQL	ug/Kg	
SL-819-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.59	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.7	PQL	ug/Kg	



## **Enclosure II**

### **Level IV Validation Reports**



## **Laboratory Data Consultants, Inc. Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** April 24 through April 25, 2013

**LDC Report Date:** June 18, 2013

**Matrix:** Soil

**Parameters:** Semivolatiles

**Validation Level:** Level IV

**Laboratory:** Eurofins

**Sample Delivery Group (SDG):** PH039

### **Sample Identification**

SL-507-SA7-SB-0.0-0.5

SL-519-SA7-SB-0.0-0.5

SL-819-SA7-SB-0.0-0.5

SL-519-SA7-SB-2.0-3.0

SL-509-SA7-SB-0.0-0.5

SL-506-SA7-SB-0.0-0.5

SL-508-SA7-SB-0.0-0.5

SL-519-SA7-SB-0.0-0.5MS

SL-519-SA7-SB-0.0-0.5MSD



## Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. GC/MS Instrument Performance Check**

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

## **III. Initial Calibration**

Initial calibration was performed using required standard.

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

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

## **IV. Continuing Calibration**

Continuing calibration was performed at the required frequencies.

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

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

## **V. Blanks**

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method.

Sample EB-042413 (from SDG PH035) was identified as an equipment blank. No semivolatile contaminants were found with the following exceptions:



Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB-042413	4/24/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate 2-Methylnaphthalene Naphthalene	0.15 ug/L 0.089 ug/L 0.20 ug/L 0.011 ug/L 0.053 ug/L	All samples in SDG PH039

Sample FB-041113 (from SDG PH029) was identified as a field blank. No semivolatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
FB-041113	4/11/12	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate 1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	0.17 ug/L 0.18 ug/L 0.082 ug/L 0.019 ug/L 0.024 ug/L 0.17 ug/L	All samples in SDG PH039

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

## VI. Surrogate Spikes

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

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-519-SA7-SB-0.0-0.5MS/MSD (SL-519-SA7-SB-0.0-0.5)	Fluoranthene	205 (47-135)	-	70 (≤30)	J (all detects)	A
	Pyrene	195 (26-143)	-	75 (≤30)	J (all detects)	
	Benzo(a)anthracene	159 (32-135)	-	55 (≤30)	J (all detects)	
	Chrysene	163 (29-148)	-	55 (≤30)	J (all detects)	
	Benzo(b)fluoranthene	163 (26-142)	-	43 (≤30)	J (all detects)	
	Benzo(a)pyrene	143 (36-138)	-	45 (≤30)	J (all detects)	
	Indeno(1,2,3-cd)pyrene	-	-	32 (≤30)	J (all detects)	
	Benzo(g,h,i)perylene	-	-	35 (≤30)	J (all detects)	
	Benzo(e)pyrene	-	-	31 (≤30)	J (all detects)	



### **VIII. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

### **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 PH039	All compounds reported below the RL.	J (all detects)	A

### **XIII. Tentatively Identified Compounds (TICs)**

Tentatively identified compounds were not reported by the laboratory.

### **XIV. System Performance**

The system performance was acceptable.

### **XV. Overall Assessment of Data**

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

### **XVI. Field Duplicates**

Samples SL-519-SA7-SB-0.0-0.5 and SL-819-SA7-SB-0.0-0.5 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:



Compound	Concentration (ug/L)		RPD (Limits)	Flag	A or P
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
1-Methylnaphthalene	0.88	1.1	22 (≤50)	-	-
2-Methylnaphthalene	1.5	1.8	18 (≤50)	-	-
Acenaphthylene	0.39	1.7U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Anthracene	0.52	0.59	13 (≤50)	-	-
Benzo(a)anthracene	4.5	2.8	47 (≤50)	-	-
Benzo(a)pyrene	5.0	2.7	60 (≤50)	J (all detects)	A
Benzo(b)fluoranthene	13	5.9	75 (≤50)	J (all detects)	A
Benzo(g,h,i)perylene	2.8	1.4	67 (≤50)	J (all detects)	A
Benzo(k)fluoranthene	9.1	2.4	117 (≤50)	J (all detects)	A
Chrysene	9.0	5.0	57 (≤50)	J (all detects)	A
Dibenzo(a,h)anthracene	1.0	1.7U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Fluoranthene	9.1	5.8	44 (≤50)	-	-
Fluorene	3.9	3.5	11 (≤50)	-	-
Indeno(1,2,3-cd)pyrene	2.5	1.4	56 (≤50)	J (all detects)	A
Naphthalene	1.5	2.1	33 (≤50)	-	-
Phenanthrene	3.1	3.3	6 (≤50)	-	-
Bis(2-Ethylhexyl)phtalate	21	14	40 (≤50)	-	-
Pyrene	7.9	5.0	45 (≤50)	-	-
Benzo(e)pyrene	5.5	18U	200 (≤50)	J (all detects) UJ (all non-detects)	A



**Santa Susana Field Laboratory**  
**Semivolatiles - Data Qualification Summary - SDG PH039**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH039	SL-819-SA7-SB-0.0-0.5	Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
PH039	SL-819-SA7-SB-0.0-0.5	Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene Benzo(e)pyrene	J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)
PH039	SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5	Acenaphthylene Dibenzo(a,h)anthracene Benzo(e)pyrene	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)
PH039	SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5	Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Indeno(1,2,3-cd)pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)

**Santa Susana Field Laboratory**  
**Semivolatiles - Laboratory Blank Data Qualification Summary - SDG PH039**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Semivolatiles - Field Blank Data Qualification Summary - SDG PH039**

No Sample Data Qualified in this SDG



LDC #: 29836M2b **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH039

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 6/5/13

Page: 1 of 1

Reviewer: *[Signature]*2nd Reviewer: *[Signature]***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	$\Delta$	Sampling dates: 4/24 - 4/25/13
II.	GC/MS Instrument performance check	$\Delta$	
III.	Initial calibration	$\Delta$	% RSD = 30
IV.	Continuing calibration/ICV	$\Delta$	ICV/CCV = 25
V.	Blanks	$\Delta$	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	$\Delta$	100/10
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	$\Delta$	
XI.	Target compound identification	$\Delta$	
XII.	Compound quantitation/RL/LOQ/LODs	$\Delta$	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	$\Delta$	
XV.	Overall assessment of data	$\Delta$	
XVI.	Field duplicates	SW	D = 2, 3
XVII.	Field blanks	SW	EB = EB-042413 (SDG # PH035) FB = FB-041113 (SDG # PH039)

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-507-SA7-SB-0.0-0.5	11	SBLKLL119	21		31	
2	SL-519-SA7-SB-0.0-0.5	12		22		32	
3	SL-819-SA7-SB-0.0-0.5	13		23		33	
4	SL-519-SA7-SB-2.0-3.0	14		24		34	
5	SL-509-SA7-SB-0.0-0.5	15		25		35	
6	SL-506-SA7-SB-0.0-0.5	16		26		36	
7	SL-508-SA7-SB-0.0-0.5	17		27		37	
8	SL-519-SA7-SB-0.0-0.5MS	18		28		38	
9	SL-519-SA7-SB-0.0-0.5MSD	19		29		39	
10		20		30		40	



**Method: Semivolatiles (EPA SW 846 Method 8270C)**

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/			
Was a curve fit used for evaluation?		/		
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?			/	
Were all percent relative standard deviations (%RSD) $\leq 30\%/15\%$ and relative response factors (RRF) $\geq 0.05$ ?	/			
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/			
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) $\geq 0.05$ ?	/			
<b>V. Blanks</b>				
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.		/		
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	/			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			/	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			/	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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?		/		
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	/			



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



# VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	T. 4-Chloroaniline	MM. 4-Chlorophenyl-phenyl ether	FFF. Di-n-octylphthalate	YYY. 2,3,5-Trimethylnaphthalene
B. Bis (2-chloroethyl) ether	U. Hexachlorobutadiene	NN. Fluorene	GGG. Benzo(b)fluoranthene	ZZZ. Perylene
C. 2-Chlorophenol	V. 4-Chloro-3-methylphenol	OO. 4-Nitroaniline	HHH. Benzo(k)fluoranthene	AAAA. Dibenzothiophene
D. 1,3-Dichlorobenzene	W. 2-Methylnaphthalene	PP. 4,6-Dinitro-2-methylphenol	III. Benzo(a)pyrene	BBBB. Benzo(a)fluoranthene
E. 1,4-Dichlorobenzene	X. Hexachlorocyclopentadiene	QQ. N-Nitrosodiphenylamine	JJJ. Indeno(1,2,3-cd)pyrene	CCCC. Benzo(b)fluorene
F. 1,2-Dichlorobenzene	Y. 2,4,6-Trichlorophenol	RR. 4-Bromophenyl-phenylether	KKK. Dibenz(a,h)anthracene	DDDD. cis/trans-Decalin
G. 2-Methylphenol	Z. 2,4,5-Trichlorophenol	SS. Hexachlorobenzene	LLL. Benzo(g,h,i)perylene	EEEE. Biphenyl
H. 2,2'-Oxybis(1-chloropropane)	AA. 2-Chloronaphthalene	TT. Pentachlorophenol	MMM. Bis(2-Chloroisopropyl)ether	FFFF. Retene
I. 4-Methylphenol	BB. 2-Nitroaniline	UU. Phenanthrene	NNN. Aniline	GGGG. C30-Hopane
J. N-Nitroso-di-n-propylamine	CC. Dimethylphthalate	VV. Anthracene	OOO. N-Nitrosodimethylamine	HHHH. 1-Methylphenanthrene
K. Hexachloroethane	DD. Acenaphthylene	WW. Carbazole	PPP. Benzoic Acid	IIII. 1,4-Dioxane
L. Nitrobenzene	EE. 2,6-Dinitrotoluene	XX. Di-n-butylphthalate	QQQ. Benzyl alcohol	JJJJ. Acetophenone
M. Isophorone	FF. 3-Nitroaniline	YY. Fluoranthene	RRR. Pyridine	KKKK. Atrazine
N. 2-Nitrophenol	GG. Acenaphthene	ZZ. Pyrene	SSS. Benzidine	LLLL. Benzaldehyde
O. 2,4-Dimethylphenol	HH. 2,4-Dinitrophenol	AAA. Butylbenzylphthalate	TTT. 1-Methylnaphthalene	MMMM. Caprolactam
P. Bis(2-chloroethoxy)methane	II. 4-Nitrophenol	BBB. 3,3'-Dichlorobenzidine	UUU. Benzo(b)thiophene	NNNN. <i>Benzo(g) pyrene</i>
Q. 2,4-Dichlorophenol	JJ. Dibenzofuran	CCC. Benzo(a)anthracene	VVV. Benzonaphthothiophene	OOOO.
R. 1,2,4-Trichlorobenzene	KK. 2,4-Dinitrotoluene	DDD. Chrysene	WWW. Benzo(e)pyrene	PPPP.
S. Naphthalene	LL. Diethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	XXX. 2,6-Dimethylnaphthalene	QQQQ.







# VALIDATION FINDINGS WORKSHEET

## Matrix Spike/Matrix Spike Duplicates

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

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

Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y	N	N/A
---	---	-----

Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

[illegible]



## Field Blanks

FB = FB-041113

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Y	N	N/A	Were field blanks identified in this SDG?

Were target compounds detected in the field blanks?

☒ N ☐ N/A

Blank units: ug/L Associated sample units: ug/L

Sampling date: 4/11/12

Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: FB

Compound	Blank ID	Sample Identification							
	FB	5x / 10x							
XX	0.17	1.7							
LL	0.18	1.8							
EEF	0.082	0.82							
TTT	0.019	0.095							
W	0.024	0.12							
S	0.17	0.85							

**Blank units:** \_\_\_\_\_ **Associated sample units:** \_\_\_\_\_

**Sampling date:**

**Field blank type:** (circle one) Field Blank / Rinsate / Other:

Associated Samples:

[illegible]

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

Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".



LDC#: 29836M2b **VALIDATION FINDINGS WORKSHEET**  
**Field Duplicates**

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

**METHOD:** GC/MS PAH (EPA SW 846 Method 8270C-SIM)

Y N NA Were field duplicate pairs identified in this SDG?  
Y N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		≤ 50 RPD	
	2	3		
1-Methylnaphthalene	0.88	1.1	22	
2-Methylnaphthalene	1.5	1.8	18	
Acenaphthylene	0.39	1.7U	200	J/uJ/A
Anthracene	0.52	0.59	13	
Benzo(a)anthracene	4.5	2.8	47	
Benzo(a)pyrene	5.0	2.7	60	J/A det
Benzo(b)fluoranthene	13	5.9	75	↓
Benzo(g,h,i)perylene	2.8	1.4	67	
Benzo(k)fluoranthene	9.1	2.4	117	
Chrysene	9.0	5.0	57	
Dibenzo(a,h)anthracene	1.0	1.7U	200	J/uJ/A
Fluoranthene	9.1	5.8	44	
Fluorene	3.9	3.5	11	
Indeno(1,2,3-cd)pyrene	2.5	1.4	56	J/A det
Naphthalene	1.5	2.1	33	
Phenanthrene	3.1	3.3	6	
Bis(2-Ethylhexyl)phtalate	21	14	40	
Pyrene	7.9	5.0	45	
Benzo(e)pyrene	5.5	18U	200	J/uJ/A



VALIDATION FINDINGS WORKSHEET  
Initial Calibration Calculation Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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

$$RRF = (A_s)(C_s)/(A_u)(C_u)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

$A_s$  = Area of compound,  
 $C_s$  = Concentration of compound,  
 $S$  = Standard deviation of the RRFs,

$A_u$  = Area of associated internal standard  
 $C_u$  = Concentration of internal standard  
 $X$  = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported		Recalculated		Reported	Recalculated	%RSD	%RSD
				RRF ( / std)	RRF ( / std)	Average RRF (initial)	Average RRF (initial)				
1	1CAL	5/1/13	Nitrosodimethylamine (1st internal standard)	1.263	1.263	1.233	1.233	7	7	7	7
			Naphthalene (2nd internal standard)	1.070	1.070	1.046	1.046	2	2	2	2
			Fluorene (3rd internal standard)	1.380	1.380	1.350	1.350	4	4	4	4
			Anthracene (4th internal standard)	1.205	1.205	1.158	1.158	6	6	6	6
			Chrysene (5th internal standard)	1.383	1.383	1.333	1.333	2	2	2	2
			Benzo(a)pyrene (6th internal standard)	1.277	1.277	1.256	1.256	4	4	4	4
2											
3											

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 #: 29836426

# VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

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

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

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

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_s)(C_s) / (A_x)(C_x)$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

$A_s$  = Area of compound,

$A_x$  = Area of associated internal standard

$C_x$  = Concentration of compound,

$C_s$  = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported		Recalculated	
					RRF (CC)	%D	RRF (CC)	%D
1	ccv 7.48	5/1/13	Nitro sodium pyrene (1st internal standard)	1.233	1.350	9	1.350	9
			Naphthalene (2nd internal standard)	1.046	1.080	3	1.080	3
			Fluorene (3rd internal standard)	1.350	1.376	2	1.376	2
			Anthracene (4th internal standard)	1.158	1.194	3	1.194	3
			Chrysene (5th internal standard)	1.333	1.366	2	1.366	2
			Benzofluoranthene (6th internal standard)	1.252	1.256	0	1.256	0
2	ccv 02.05	5/2/13	(1st internal standard)		1.200	3	1.200	3
			(2nd internal standard)		1.077	3	1.077	3
			(3rd internal standard)		1.385	3	1.385	3
			(4th internal standard)		1.190	3	1.190	3
			(5th internal standard)		1.360	2	1.360	2
			(6th internal standard)		1.253	0	1.253	0
3			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
			(5th internal standard)					
			(6th internal standard)					

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



Surrogate Results VerificationReviewer: FT2nd reviewer:   **METHOD:** GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
<del>Nitrobenzene-d5</del> <u>Fluoranthene-d10</u>	<u>1.0</u>	<u>0.902</u>	<u>90</u>	<u>90</u>	<u>0</u>
<del>2-Fluorobiphenyl</del> <u>Benzo(a)pyrene-d12</u>	<u>1</u>	<u>1.00</u>	<u>100</u>	<u>100</u>	<u>1</u>
<del>Terphenyl-d14</del> <u>1-Methylnaphthalene-d10</u>	<u>1</u>	<u>0.995</u>	<u>99</u>	<u>99</u>	<u>1</u>
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:   

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:   

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					



VALIDATION FINDINGS WORKSHEET  
Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SSC - SC) / SA$  Where: SSC = Spiked sample concentration  
SA = Spike added  
SC = Sample concentration  
MSDC = Matrix spike duplicate concentration

RPD =  $100 * MSC / (SSC + MSDC)$  MSC = Matrix spike concentration

MS/MSD samples: 8 + 91

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD		MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.33	33.33	ND	31.7	30.49	95	95	91	91	4	4
Pentachlorophenol											
Pyrene	↓	↓	7.69	72.79	32.98	195	195	76	76	75	75

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.



VALIDATION FINDINGS WORKSHEET  
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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

% Recovery =  $100 * (SC/SA)$

Where: SSC = Spike concentration  
SA = Spike added

RPD =  $100 * (LCSC - LCSDC) / ((LCSC + LCSDC) / 2)$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCSDC samples: 11940318 P1

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS		LCSD		Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Phenol														
N-Nitroso-di-n-propylamine														
4-Chloro-3-methylphenol		NA												
Acenaphthene	33.33	33.33 P1	32.94	NA	99	99								
Pentachlorophenol														
Pyrene	33.33	NA	29.98	NA	90	90			NA					

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.







Sample Description: SL-819-SA7-SB-0.0-0.5 Soil  
SSFL Phase 3 Subarea 7

LLI Sample # SW 7036183  
LLI Group # 1385735  
Account # 13013

Project Name: Phase 3 Subarea 7

Collected: 04/25/2013 08:50 by SM

CDM Federal Programs Corp.

3201 Jermantown Road

Submitted: 04/26/2013 09:15

Suite 400

Reported: 05/10/2013 10:53

Fairfax VA 22030

SL819 SDG#: PH039-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
<b>GC/MS Semivolatiles SW-846 8270D SIM</b>						
12969	Acenaphthene	83-32-9	1.7 U	1.7	0.70	1
12969	Acenaphthylene	208-96-8	1.7 U	1.7	0.35	1
12969	Anthracene	120-12-7	0.59 J	1.7	0.35	1
12969	Benzo(a)anthracene	56-55-3	2.8	1.7	0.70	1
12969	Benzo(a)pyrene	50-32-8	2.7	1.7	0.70	1
12969	Benzo(b)fluoranthene	205-99-2	5.9	1.7	0.70	1
12969	Benzo(e)pyrene	192-97-2	18 U	18	3.5	1
12969	Benzo(g,h,i)perylene	191-24-2	1.4 J	1.7	0.70	1
12969	Benzo(k)fluoranthene	207-08-9	2.4	1.7	0.70	1
12969	Butylbenzylphthalate	85-68-7	19 U	19	6.3	1
12969	Di-n-butylphthalate	84-74-2	19 U	19	6.3	1
12969	Chrysene	218-01-9	5.0	1.7	0.35	1
12969	Dibenz(a,h)anthracene	53-70-3	1.7 U	1.7	0.70	1
12969	Diethylphthalate	84-66-2	19 U	19	6.3	1
12969	Dimethylphthalate	131-11-3	19 U	19	6.3	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	14 J	19	6.3	1
12969	Fluoranthene	206-44-0	5.8	1.7	0.70	1
12969	Fluorene	86-73-7	3.5	1.7	0.70	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	1.4 J	1.7	0.70	1
12969	1-Methylnaphthalene	90-12-0	1.1 J	1.7	0.70	1
12969	2-Methylnaphthalene	91-57-6	1.8	1.7	0.70	1
12969	Naphthalene	91-20-3	2.1	1.7	0.70	1
12969	N-Nitrosodimethylamine	62-75-9	1.7 U	1.7	0.70	1
12969	Di-n-octylphthalate	117-84-0	19 U	19	6.3	1
12969	Phenanthrene	85-01-8	3.3	1.7	0.70	1
12969	Pyrene	129-00-0	5.0	1.7	0.70	1
<b>Pesticides/PCBs SW-846 8082A</b>						
10592	Aroclor 5432	63496-31-1	34 U	34	10	1
10592	Aroclor 5442	12642-23-8	34 U	34	10	1
10592	Aroclor 5460	11126-42-4	34 U	34	10	1
10592	PCB-1016	12674-11-2	17 U	17	3.4	1
10592	PCB-1221	11104-28-2	17 U	17	5.2	1
10592	PCB-1232	11141-16-5	17 U	17	4.2	1
10592	PCB-1242	53469-21-9	17 U	17	3.4	1
10592	PCB-1248	12672-29-6	17 U	17	3.4	1
10592	PCB-1254	11097-69-1	6.1 J	17	4.5	1
10592	PCB-1260	11096-82-5	17 U	17	4.0	1
10592	PCB-1262	37324-23-5	17 U	17	3.4	1
10592	PCB-1268	11100-14-4	17 U	17	3.4	1
<b>GC Petroleum SW-846 8015B modified</b>						
<b>Hydrocarbons</b>						
12952	EFH (C12-C14)	n.a.	5.2 U	5.2	2.1	1
12952	EFH (C15-C20)	n.a.	14	5.2	2.1	1
12952	EFH (C21-C30)	n.a.	56	5.2	2.1	1
12952	EFH (C30-C40)	n.a.	79	10	4.2	1
12952	EFH (C8-C11)	n.a.	5.2 U	5.2	2.1	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

\*=This limit was used in the evaluation of the final result



Sample Description: SL-519-SA7-SB-0.0-0.5 Soil  
SSFL Phase 3 Subarea 7

LLI Sample # SW 7036179  
LLI Group # 1385735  
Account # 13013

Project Name: Phase 3 Subarea 7

Collected: 04/25/2013 08:45 by SM

CDM Federal Programs Corp.

3201 Jermantown Road

Submitted: 04/26/2013 09:15

Suite 400

Reported: 05/10/2013 10:53

Fairfax VA 22030

SL519 SDG#: PH039-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation*	Dry Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270D SIM	ug/kg	ug/kg	ug/kg	
12969	Acenaphthene	83-32-9	1.7 U	1.7	0.68	1
12969	Acenaphthylene	208-96-8	0.39 J	1.7	0.34	1
12969	Anthracene	120-12-7	0.52 J	1.7	0.34	1
12969	Benzo(a)anthracene	56-55-3	4.5	1.7	0.68	1
12969	Benzo(a)pyrene	50-32-8	5.0	1.7	0.68	1
12969	Benzo(b)fluoranthene	205-99-2	13	1.7	0.68	1
12969	Benzo(e)pyrene	192-97-2	5.5 J	17	3.4	1
12969	Benzo(g,h,i)perylene	191-24-2	2.8	1.7	0.68	1
12969	Benzo(k)fluoranthene	207-08-9	9.1	1.7	0.68	1
12969	Butylbenzylphthalate	85-68-7	18 U	18	6.1	1
12969	Di-n-butylphthalate	84-74-2	18 U	18	6.1	1
12969	Chrysene	218-01-9	9.0	1.7	0.34	1
12969	Dibenz(a,h)anthracene	53-70-3	1.0 J	1.7	0.68	1
12969	Diethylphthalate	84-66-2	18 U	18	6.1	1
12969	Dimethylphthalate	131-11-3	18 U	18	6.1	1
12969	Bis(2-Ethylhexyl)phthalate	117-81-7	21	18	6.1	1
12969	Fluoranthene	206-44-0	9.1	1.7	0.68	1
12969	Fluorene	86-73-7	3.9	1.7	0.68	1
12969	Indeno(1,2,3-cd)pyrene	193-39-5	2.5	1.7	0.68	1
12969	1-Methylnaphthalene	90-12-0	0.88 J	1.7	0.68	1
12969	2-Methylnaphthalene	91-57-6	1.5 J	1.7	0.68	1
12969	Naphthalene	91-20-3	1.5 J	1.7	0.68	1
12969	N-Nitrosodimethylamine	62-75-9	1.7 U	1.7	0.68	1
12969	Di-n-octylphthalate	117-84-0	18 U	18	6.1	1
12969	Phenanthrene	85-01-8	3.1	1.7	0.68	1
12969	Pyrene	129-00-0	7.9	1.7	0.68	1

Pesticides/PCBs	SW-846 8082A	ug/kg	ug/kg	ug/kg	
10592	Aroclor 5432	63496-31-1	33 U	33	10
10592	Aroclor 5442	12642-23-8	33 U	33	10
10592	Aroclor 5460	11126-42-4	33 U	33	10
10592	PCB-1016	12674-11-2	17 U	17	3.3
10592	PCB-1221	11104-28-2	17 U	17	5.1
10592	PCB-1232	11141-16-5	17 U	17	4.1
10592	PCB-1242	53469-21-9	17 U	17	3.3
10592	PCB-1248	12672-29-6	17 U	17	3.3
10592	PCB-1254	11097-69-1	7.0 J	17	4.4
10592	PCB-1260	11096-82-5	17 U	17	3.9
10592	PCB-1262	37324-23-5	17 U	17	3.3
10592	PCB-1268	11100-14-4	17 U	17	3.3

GC Petroleum	SW-846 8015B modified	mg/kg	mg/kg	mg/kg	
Hydrocarbons					
12952	EFH (C12-C14)	n.a.	2.5 J	5.1	2.0
12952	EFH (C15-C20)	n.a.	14	5.1	2.0
12952	EFH (C21-C30)	n.a.	41	5.1	2.0
12952	EFH (C30-C40)	n.a.	95	10	4.1
12952	EFH (C8-C11)	n.a.	3.0 J	5.1	2.0

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

\*=This limit was used in the evaluation of the final result



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** April 24 through April 25, 2013

**LDC Report Date:** June 24, 2013

**Matrix:** Soil

**Parameters:** Polychlorinated Biphenyls

**Validation Level:** Level IV

**Laboratory:** Eurofins

**Sample Delivery Group (SDG):** PH039

**Sample Identification**

SL-507-SA7-SB-0.0-0.5  
SL-519-SA7-SB-0.0-0.5  
SL-819-SA7-SB-0.0-0.5  
SL-519-SA7-SB-2.0-3.0  
SL-509-SA7-SB-0.0-0.5  
SL-506-SA7-SB-0.0-0.5  
SL-508-SA7-SB-0.0-0.5  
SL-519-SA7-SB-0.0-0.5MS  
SL-519-SA7-SB-0.0-0.5MSD



## Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082A for Polychlorinated Biphenyls.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. GC/ECD Instrument Performance Check**

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

## **III. Initial Calibration**

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

## **IV. Continuing Calibration**

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

## **V. Blanks**

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Sample EB-042413 (from SDG PH035) was identified as an equipment blank. No polychlorinated biphenyl contaminants were found.

Sample FB-041113 (from SDG PH029) was identified as a field blank. No polychlorinated biphenyl contaminants were found.



## VI. Surrogate Spikes

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

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
PBLK17120	ZBmultiR2	Tetrachloro-m-xylene	129 (45-120)	All TCL compounds	J (all detects)	P
SL-507-SA7-SB-0.0-0.5	ZBmultiR2	Tetrachloro-m-xylene	126 (45-120)	All TCL compounds	J (all detects)	P
SL-508-SA7-SB-0.0-0.5	ZBmultiR2	Tetrachloro-m-xylene	124 (45-120)	All TCL compounds	J (all detects)	P

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Affected Compound	Flag	A or P
LCS17120 (All samples in SDG PH039)	Aroclor-5442	-	-	40 (≤30)	Aroclor-5432 Aroclor-5442 Aroclor-5460	J (all detects) UJ (all non-detects)	P

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

## XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

## XII. Target Compound Identification

All target compound identifications were within validation criteria.



### **XIII. Compound Quantitation**

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 PH039	All compounds reported below the RL.	J (all detects)	A

### **XIV. Overall Assessment of Data**

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

### **XV. Field Duplicates**

Samples SL-519-SA7-SB-0.0-0.5 and SL-819-SA7-SB-0.0-0.5 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
Aroclor-1254	7.0	6.1	14 (≤50)	-	-



**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Data Qualification Summary - SDG PH039**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH039	SL-507-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	Aroclor-5432 Aroclor-5442 Aroclor-5460	J (all detects) UJ (all non-detects)	P	Laboratory control samples (RPD) (E)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG PH039**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG PH039**

No Sample Data Qualified in this SDG



LDC #: 29836M3b **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH039

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 6/5/13

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

**METHOD:** GC Polychlorinated Biphenyls (EPA SW 846 Method 8082A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/24 - 4/25/13
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD $\leq 20$
IV.	Continuing calibration/ICV	A	ICV/CCV $\leq 20$
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	A	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	SW	D = 2 + 3
XVI.	Field blanks	ND	EB = EB - 042413 (SDG # PH035) FB = FB - 041113 (SDG # PH039) 2

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples:

2012

1	SL-507-SA7-SB-0.0-0.5	11	PB LK17120	21		31	
2	SL-519-SA7-SB-0.0-0.5	12		22		32	
3	SL-819-SA7-SB-0.0-0.5	13		23		33	
4	SL-519-SA7-SB-2.0-3.0	14		24		34	
5	SL-509-SA7-SB-0.0-0.5	15		25		35	
6	SL-506-SA7-SB-0.0-0.5	16		26		36	
7	SL-508-SA7-SB-0.0-0.5	17		27		37	
8	SL-519-SA7-SB-0.0-0.5MS	18		28		38	
9	SL-519-SA7-SB-0.0-0.5MSD	19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_



LDC #: 29836M3h

## VALIDATION FINDINGS CHECKLIST

Page: 1 of 2Reviewer: F72nd Reviewer: CAMethod: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq 20\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 20\%$ or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



LDC #: 29836 M3b

## VALIDATION FINDINGS CHECKLIST

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

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field duplicates.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XV. Field blanks				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field blanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	







**METHOD:** GC / HPLC

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

Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?	Y	N	N/A
Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?	Y	N	N/A

**Level IV/D Only**

Y/N	N/A	N/A	Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
-----	-----	-----	---

[illegible]



LDC #: 29836436

VALIDATION FINDINGS WORKSHEET  
Field DuplicatesPage: 1 of 1  
Reviewer: PJ  
2nd reviewer: SQ

METHOD: GC HPLC

Were field duplicate pairs identified in this SDG?

Y N N/A

Were target compounds detected in the field duplicate pairs?

Y N N/A

Compound	Concentration ( ug/kg )		%RPD Limit	Qualification Parent only / All Samples
	2	3		
Aroclor 1254	7.0	6.1	14	

Compound	Concentration ( )		%RPD Limit	Qualification Parent only / All Samples



LDC #: 29836436

# VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: C

METHOD: GC HPLC

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C

Average CF = sum of the CF/number of standards

%RSD =  $100 * (S/X)$ 

Where:

A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (200 std)	CF (200 std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	1CAL ZBR1	5/2/13	Ardebor 1260-1	13240	13240	13276	13276	14	14
	ZBR2		↓	48103	48103	47740	47740	8	8
2									
3									
4									

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



LDC #: 298361136

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Results Verification**

Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: QA

METHOD: GC ✓ HPLC \_\_\_\_\_

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

$$\% \text{ Difference} = 100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$$

Where: ave. CF = initial calibration average CF  
CF = continuing calibration CF  
A = Area of compound  
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(lcal)/ CCV Conc.	Reported		Recalculated	
					CF/ Conc. CCV	%D	CF/ Conc. CCV	%D
1	cen 21:40	5/2/13	Aroclor 1260 ZBR1	200.00	203.33	2	203.33	2
			ZBR2	200.00	194.38	2	194.38	2
2								
3								
4								

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



VALIDATION FINDINGS WORKSHEET  
Surrogate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery:  $SF/SS \times 100$   
Where: SF = Surrogate Found  
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TCMX	ZBMR7	10	12.50224	126	125	1
DCB	↓	10	10.885857	109	109	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference



METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery =  $100 * ((SSC - SC)/SA)$  Where SSC = Spiked sample concentration SA = Spike added MS = Matrix spike

RPD =  $((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD) * 100$  MSD = Matrix spike duplicate

MS/MSD samples: 879

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)		Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	MS	MSD	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)												
Diesel (8015)												
Benzene (8021B)												
Methane (RSK-175)												
2,4-D (8151)												
Dinoseb (8151)												
Naphthalene (8310)												
Anthracene (8310)												
HMX (8330)												
2,4,6-Trinitrotoluene (8330)												
PCB-1260	164	164	ND		141.68	149.59	86	86	91	91	5	5

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



The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

$$\text{RPD} = ((\text{SSCLCS} - \text{SSCLCSD}) * 2) / ((\text{SSCLCS} + \text{SSCLCSD})) * 100$$

Where

SSC = Spiked sample concentration

SA = Spike added

LCS = Laboratory Control Sample

SC = Sample concentration

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS ID 17120

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		LCS		LCSD		Percent Recovery		Recalc.		LCS/LCSD	
	LCS	LCSD		LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)															
Diesel (8015)															
Benzene (8021B)															
Methane (RSK-175)															
2,4-D (8151)															
Dinoseb (8151)															
Naphthalene (8310)															
Anthracene (8310)															
HMX (8330)															
2,4,6-Trinitrotoluene (8330)															
PCB - 1240	167	NA	ND	166.04	NA	99	99	NA	NA						

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 29836436

## VALIDATION FINDINGS WORKSHEET

Sample Calculation VerificationPage: 1 of 1Reviewer: F72nd Reviewer: RAMETHOD: GC HPLCY/N N/A  
X/N N/AWere all reported results recalculated and verified for all level IV samples?  
Were all recalculated results for detected target compounds within 10% of the reported results?Concentration =  $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$ 

A= Area or height of the compound to be measured

Fv= Final Volume of extract

Df= Dilution Factor

RF= Average response factor of the compound

In the initial calibration

Vs= Initial volume of the sample

Ws= Initial weight of the sample

%S= Percent Solid

Example:

Sample ID: #1 Compound Name: Araclof 1254Concentration = 6.5417

$$= 0.976$$
$$= 6.7 \text{ ug/kg} \approx 70 \text{ ug/kg}$$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	1254-1 =	134643.79687 (10)		1254-1 = 4.87742	
		9051 (30.5)		-2 = 4.6204	
				-3 = 7.039211	
	=	4.87742		-4 = 4.401997	
				-5 = 11.769691	
				6.5417	

Comments: \_\_\_\_\_



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** April 24 through April 25, 2013

**LDC Report Date:** July 1, 2013

**Matrix:** Soil

**Parameters:** Metals

**Validation Level:** Level IV

**Laboratory:** Eurofins

**Sample Delivery Group (SDG):** PH039

**Sample Identification**

SL-507-SA7-SB-0.0-0.5

SL-519-SA7-SB-0.0-0.5

SL-819-SA7-SB-0.0-0.5

SL-519-SA7-SB-2.0-3.0

SL-509-SA7-SB-0.0-0.5

SL-506-SA7-SB-0.0-0.5

SL-508-SA7-SB-0.0-0.5

SL-519-SA7-SB-0.0-0.5MS

SL-519-SA7-SB-0.0-0.5MSD

SL-519-SA7-SB-0.0-0.5DUP



## Introduction

This data review covers 10 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010C, 6020A, and 7471B for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## I. Technical Holding Times

All technical holding time requirements were met.

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

## II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

## III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

## IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Phosphorus Tin	1.439 mg/Kg 1.474 mg/Kg	All samples in SDG PH039
ICB/CCB	Thallium	0.17 ug/L	All samples in SDG PH039
ICB/CCB	Antimony	2.5 ug/L	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0
ICB/CCB	Nickel	1.0 ug/L	SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:



Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-507-SA7-SB-0.0-0.5	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-819-SA7-SB-0.0-0.5	Tin Antimony	2.7 mg/Kg 0.54 mg/Kg	2.7U mg/Kg 0.54U mg/Kg
SL-519-SA7-SB-2.0-3.0	Tin Antimony	2.5 mg/Kg 0.74 mg/Kg	2.5U mg/Kg 0.74U mg/Kg
SL-509-SA7-SB-0.0-0.5	Tin	6.6 mg/Kg	6.6U mg/Kg
SL-506-SA7-SB-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-508-SA7-SB-0.0-0.5	Tin	3.2 mg/Kg	3.2U mg/Kg

Samples EB-042413 (from SDG PH038) was identified as an equipment blank. No metal contaminants were found with the following exceptions:

Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB-042413	4/24/13	Boron Sodium Tin	0.0319 mg/L 0.228 mg/L 0.0035 mg/L	All samples in SDG PH039

Sample FB-041113 (from SDG PH029) was identified as a field blank. No metal contaminants were found with the following exceptions:

Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
FB-041113	4/11/13	Copper Molybdenum	0.0036 mg/L 0.0036 mg/L	All samples in SDG PH039

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were not detected with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-507-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	10.5 mg/Kg 0.30 mg/Kg 65.0 mg/Kg	10.5U mg/Kg 0.30U mg/Kg 65.0U mg/Kg
SL-519-SA7-SB-0.0-0.5	Boron Sodium	15.6 mg/Kg 88.9 mg/Kg	15.6U mg/Kg 88.9U mg/Kg



Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-819-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	13.7 mg/Kg 0.34 mg/Kg 84.8 mg/Kg	13.7U mg/Kg 0.34U mg/Kg 84.8U mg/Kg
SL-519-SA7-SB-2.0-3.0	Boron Molybdenum Sodium	10.6 mg/Kg 0.41 mg/Kg 95.0 mg/Kg	10.6U mg/Kg 0.41U mg/Kg 95.0U mg/Kg
SL-509-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	11.7 mg/Kg 0.34 mg/Kg 77.7 mg/Kg	11.7U mg/Kg 0.34U mg/Kg 77.7U mg/Kg
SL-506-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	12.0 mg/Kg 0.48 mg/Kg 80.3 mg/Kg	12.0U mg/Kg 0.48U mg/Kg 80.3U mg/Kg
SL-508-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	11.8 mg/Kg 0.66 mg/Kg 69.7 mg/Kg	11.8U mg/Kg 0.66U mg/Kg 69.7U mg/Kg

## V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

## VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-519-SA7-SB-0.0-0.5MS/MSD (All samples in SDG PH039)	Antimony Lead	57 (75-125) 50 (75-125)	57 (75-125) 44 (75-125)	- -	J (all detects) UJ (all non-detects)	A
SL-519-SA7-SB-0.0-0.5MS/MSD (All samples in SDG PH039)	Potassium	129 (75-125)	135 (75-125)	-	J (all detects)	A

## VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:



DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-519-SA7-SB-0.0-0.5DUP (All samples in SDG PH039)	Calcium Cobalt Lead Phosphorus	26 ( $\leq 20$ ) - - 36 ( $\leq 20$ )	- 3.5663 ( $\leq 2.02$ ) 9.8327 ( $\leq 6.08$ ) -	J (all detects) UJ (all non-detects)	A

### VIII. Laboratory Control Samples (LCS)

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

### IX. Internal Standards

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

### X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

### XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-519-SA7-SB-0.0-0.5	Nickel  Phosphorus	24 ( $\leq 10$ )  17 ( $\leq 10$ )	All samples in SDG PH039	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

### XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG PH039	All analytes reported below the RL and above the MDL.	J (all detects)	A

### XIII. Overall Assessment of Data

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



#### XIV. Field Duplicates

Samples SL-519-SA7-SB-0.0-0.5 and SL-819-SA7-SB-0.0-0.5 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
Aluminum	11700	12000	3 (≤50)	-	-
Antimony	4.6	0.54	158 (≤50)	J (all detects)	A
Arsenic	4.4	4.1	7 (≤50)	-	-
Barium	104	107	3 (≤50)	-	-
Beryllium	0.46	0.47	2 (≤50)	-	-
Boron	15.6	13.7	13 (≤50)	-	-
Cadmium	1.19	0.38	103 (≤50)	J (all detects)	A
Calcium	7940	6150	25 (≤50)	-	-
Chromium	15.4	17.0	10 (≤50)	-	-
Cobalt	7.6	4.4	53 (≤50)	J (all detects)	A
Copper	12.3	12.0	2 (≤50)	-	-
Iron	17900	18500	3 (≤50)	-	-
Lead	23.8	15.1	45 (≤50)	-	-
Lithium	20.2	19.6	3 (≤50)	-	-
Magnesium	4490	4550	1 (≤50)	-	-
Manganese	355	328	8 (≤50)	-	-
Mercury	0.058	0.049	17 (≤50)	-	-
Molybdenum	2.8	0.34	157 (≤50)	J (all detects)	A
Nickel	8.9	10.1	13 (≤50)	-	-



Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
Phosphorus	679	515	27 (≤50)	-	-
Potassium	3090	3320	7 (≤50)	-	-
Selenium	0.19	0.14	30 (≤50)	-	-
Silver	0.035	0.033	6 (≤50)	-	-
Sodium	88.9	84.8	5 (≤50)	-	-
Strontium	37.5	36.6	2 (≤50)	-	-
Thallium	0.23	0.26	12 (≤50)	-	-
Tin	10.9	2.7	121 (≤50)	J (all detects)	A
Titanium	977	1040	6 (≤50)	-	-
Vanadium	29.3	30.2	3 (≤50)	-	-
Zinc	71.0	69.5	2 (≤50)	-	-
Zirconium	2.5	2.5	0 (≤50)	-	-



**Santa Susana Field Laboratory**  
**Metals - Data Qualification Summary - SDG PH039**

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	Antimony Lead	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	Potassium	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	Calcium Phosphorus	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	Cobalt Lead	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (difference) (E)
PH039	SL-519-SA7-SB-0.0-0.5	Nickel  Phosphorus	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
PH039	SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5	Antimony Cadmium Cobalt Molybdenum Tin	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)



**Santa Susana Field Laboratory**  
**Metals - Laboratory Blank Data Qualification Summary - SDG PH039**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH039	SL-507-SA7-SB-0.0-0.5	Tin	2.8U mg/Kg	A	B
PH039	SL-819-SA7-SB-0.0-0.5	Tin Antimony	2.7U mg/Kg 0.54U mg/Kg	A	B
PH039	SL-519-SA7-SB-2.0-3.0	Tin Antimony	2.5U mg/Kg 0.74U mg/Kg	A	B
PH039	SL-509-SA7-SB-0.0-0.5	Tin	6.6U mg/Kg	A	B
PH039	SL-506-SA7-SB-0.0-0.5	Tin	2.9U mg/Kg	A	B
PH039	SL-508-SA7-SB-0.0-0.5	Tin	3.2U mg/Kg	A	B

**Santa Susana Field Laboratory**  
**Metals - Field Blank Data Qualification Summary - SDG PH039**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH039	SL-507-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	10.5U mg/Kg 0.30U mg/Kg 65.0U mg/Kg	A	F
PH039	SL-519-SA7-SB-0.0-0.5	Boron Sodium	15.6U mg/Kg 88.9U mg/Kg	A	F
PH039	SL-819-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	13.7U mg/Kg 0.34U mg/Kg 84.8U mg/Kg	A	F
PH039	SL-519-SA7-SB-2.0-3.0	Boron Molybdenum Sodium	10.6U mg/Kg 0.41U mg/Kg 95.0U mg/Kg	A	F
PH039	SL-509-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	11.7U mg/Kg 0.34U mg/Kg 77.7U mg/Kg	A	F
PH039	SL-506-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	12.0U mg/Kg 0.48U mg/Kg 80.3U mg/Kg	A	F



SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH039	SL-508-SA7-SB-0.0-0.5	Boron Molybdenum Sodium	11.8U mg/Kg 0.66U mg/Kg 69.7U mg/Kg	A	F



LDC #: 29836M4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH039

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 6/11/13

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

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	A	Sampling dates: 4/25/13 4/24-4/25/13
II.	ICP/MS Tune	A	C
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	A	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	SW	(2,3)
XV.	Field Blanks	SW	FB= FB-041113 (PH029) EB= EB-042413 (PH038)

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-507-SA7-SB-0.0-0.5	11		21		31	
2	SL-519-SA7-SB-0.0-0.5	12		22		32	
3	SL-819-SA7-SB-0.0-0.5	13		23		33	
4	SL-519-SA7-SB-2.0-3.0	14		24		34	
5	SL-509-SA7-SB-0.0-0.5	15		25		35	
6	SL-506-SA7-SB-0.0-0.5	16		26		36	
7	SL-508-SA7-SB-0.0-0.5	17		27		37	
8	SL-519-SA7-SB-0.0-0.5MS	18		28		38	
9	SL-519-SA7-SB-0.0-0.5MSD	19		29		39	
10	SL-519-SA7-SB-0.0-0.5DUP	20		30		40	

Notes: \_\_\_\_\_



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

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. ICP/MS Tune</b>				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were %RSD of isotopes in the tuning solution $\leq 5\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the proper number of standards used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all initial calibration correlation coefficients $\geq 0.995$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. ICP Interference Check Sample</b>				
Were ICP interference check samples performed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\pm RL$ ( $\pm 2X RL$ for soil) was used for samples that were $\leq 5X$ the RL, including when only one of the duplicate sample values were $\leq 5X$ the RL.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Validation Area	Yes	No	NA	Findings/Comments
<b>VIII. Furnace Atomic Absorption QC</b>				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analyses have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
<b>IX. ICP Serial Dilution</b>				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
<b>X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)</b>				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
<b>XI. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
<b>XII. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	✓			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	✓			
Target analytes were detected in the field blanks.	✓			



All circled elements are applicable to each sample.

[illegible]

Comments: Mercury by CVAA if performed



METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

Reason: B

Soil preparation factor applied: 100x

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

Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/L)	Maximum ICB/CCB <sup>a</sup> (ug/L)	Action Level	1	3	4	5	6	7
P	1.439			7.195						
Sn	1.474			7.37	2.8	2.7	2.5	6.6	2.9	3.2
Tl			0.17	0.17						

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-4

Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/L)	Maximum ICB/CCB <sup>a</sup> (ug/L)	Action Level	3	4
Sb			2.5	1.25	0.54	0.74

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 5-7

Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/L)	Maximum ICB/CCB <sup>a</sup> (ug/L)	Action Level	No Qualifiers
Ni			1.0	0.5	

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.



**Field blank type:** (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ Associated Samples: \_\_\_\_\_ All

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED 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".



**METHOD:** Trace metals (EPA SW 846 Method 6010B/6020A/7000)

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

Q	N	N/A
Was a matrix spike analyzed for each matrix in this SDG?		

Y/N	N/A	Were matrix spike percent recoveries
<del>Y/N</del>	<del>N/A</del>	

of 4 or more, no action was taken.

Were all duplicate sample relative percent differences (RPD)  $\leq 20\%$  for water samples and  $\leq 35\%$  for soil samples?

**LEVEL IV ONLY:**

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations

[illegible]

Comments: 8/9: Al, Ca, Fe, Mg, Mn, S, Si, Ti, Zn



**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

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

Q N N/A

Was a duplicate sample analyzed for each matrix in this SDG?

Y ~~0~~ N/A

Were all duplicate sample relative percent differences (RPD)  $\leq 20\%$  for water samples and  $\leq 35\%$  for soil samples? If no, see qualifications below. A control limit of  $\pm$  R.L. ( $\pm 2X$  R.L. for soil) was used for sample values that were  $< 5X$  the R.L., including the case when only one of the duplicate sample values was  $< 5X$  R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

**LEVEL IV ONLY:**

Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments: sb, cd, mo, fg, sn ok by difference







LDC#: 29836M4**VALIDATION FINDINGS WORKSHEET**  
**Field Duplicates**Page: 1 of 7  
Reviewer: CR  
2nd Reviewer: CA**METHOD:** Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD ( $\leq 50$ )	Qualifiers (Parents Only)
	2	3		
Aluminum	11700	12000	3	
Antimony	4.6	0.54	158	Jdet/A (FD)
Arsenic	4.4	4.1	7	
Barium	104	107	3	
Beryllium	0.46	0.47	2	
Boron	15.6	13.7	13	
Cadmium	1.19	0.38	103	Jdet/A (FD)
Calcium	7940	6150	25	
Chromium	15.4	17.0	10	
Cobalt	7.6	4.4	53	Jdet/A (FD)
Copper	12.3	12.0	2	
Iron	17900	18500	3	
Lead	23.8	15.1	45	
Lithium	20.2	19.6	3	
Magnesium	4490	4550	1	
Manganese	355	328	8	
Mercury	0.058	0.049	17	
Molybdenum	2.8	0.34	157	Jdet/A (FD)
Nickel	8.9	10.1	13	



LDC#: 29836M4**VALIDATION FINDINGS WORKSHEET**  
**Field Duplicates**Page: 2 of 2  
Reviewer: ca  
2nd Reviewer: ca**METHOD:** Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD ( $\leq 50$ )	Qualifiers (Parents Only)
	2	3		
Phosphorus	679	515	27	
Potassium	3090	3320	7	
Selenium	0.19	0.14	30	
Silver	0.035	0.033	6	
Sodium	88.9	84.8	5	
Strontium	37.5	36.6	2	
Thallium	0.23	0.26	12	
Tin	10.9	2.7	121	Jdet/A (FD)
Titanium	977	1040	6	
Vanadium	29.3	30.2	3	
Zinc	71.0	69.5	2	
Zirconium	2.5	2.5	0	

V:\FIELD DUPLICATES\FD\_inorganic\29836M4.wpd



LDC #: 09836M4

# VALIDATION FINDINGS WORKSHEET Initial and Continuing Calibration Calculation Verification

Page: 1 of 1  
 Reviewer: GR  
 2nd Reviewer: SR

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

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$\%R = \frac{\text{Found}}{\text{True}} \times 100$  Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution  
 True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated		Reported		Acceptable (Y/N)
					%R	%R	%R	%R	
ICV	ICP (Initial calibration)	Sb	599.7	600	100		100		Y
ICV	ICP/MS (Initial calibration)	Sr	50.15	50	100.3		100.3		Y
ICV	CVAA (Initial calibration)	Hg	2.46	2.5	98.4		98.4		Y
CCV3	ICP (Continuing calibration)	P	507.37	500	101.5		101.5		Y
CCV3	ICP/MS (Continuing calibration)	Tl	25.78	25	103.1		103.1		Y
CCV3	CVAA (Continuing calibration)	Hg	0.99	1.0	99.0		99.0		Y
	GFAA (Initial calibration)								
	GFAA (Continuing calibration)								

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



LDC #: 99836m

VALIDATION FINDINGS WORKSHEET  
Level IV Recalculation Worksheet

Page: 1 of 1  
Reviewer: [Signature]  
2nd Reviewer: [Signature]

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

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{\text{Found} - \text{True}}{\text{True}} \times 100$$
  
Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation,  
Found = SSR (spiked sample result) - SR (sample result).  
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$
  
Where, S = Original sample concentration  
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$
  
Where, I = Initial Sample Result (mg/L)  
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated		Reported		Acceptable (Y/N)
					%R / RPD / %D	%R / RPD / %D	%R / RPD / %D	%R / RPD / %D	
ICSPB	ICP interference check	Ni	896.8	1000	89.7	89.7	89.7	89.7	Y
LCS	Laboratory control sample	As	0.100	0.1	100	100	100	100	Y
8	Matrix spike	As	(SSR-SR) 10.9875	9.901	111	111	111	111	Y
10	Duplicate	Ti	953.4208	968.4208	2	2	2	2	Y
2	ICP serial dilution	Zn	699.59	724.8	4	4	4	4	Y

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



LDC #: 29836m4**VALIDATION FINDINGS WORKSHEET**  
**Sample Calculation Verification**Page: 1 of 2Reviewer: CR2nd reviewer: CA**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

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

Y N N/A

Have results been reported and calculated correctly?

Y N N/A

Are results within the calibrated range of the instruments and within the linear range of the ICP?

Y N N/A

Are all detection limits below the CRDL?

Detected analyte results for SR were recalculated and verified using the following equation:Concentration =  $\frac{(RD)(FV)(Dil)}{(In. Vol.)}$ 

Recalculation:

RD = Raw data concentration  
FV = Final volume (ml)  
In. Vol. = Initial volume (ml) or weight (G)  
Dil = Dilution factor

$$\frac{100 \text{ mL} (2) (185 \text{ mg/L})}{0.976 (1.01 \text{ g}) (1000)} = 37.53 \text{ mg/kg}$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	2	Al	11700	11700	Y
		Sb	4.6	4.6	
		As	4.4	4.4	
		Ba	104	104	
		Be	0.46	0.46	
		B	15.6	15.6	
		Cd	1.2	1.2	
		Ca	7940	7940	
		Cr	15.4	15.4	
		Co	7.6	7.6	
		Cu	12.3	12.3	
		Fe	17900	17900	
		Pb	23.8	23.8	
		Li	20.2	20.2	
		Mg	4490	4490	
		Mn	355	355	
		Hg	0.058	0.058	
		Mo	2.8	2.8	
		Ni	8.9	8.9	
		P	679	679	Y

Note: \_\_\_\_\_







**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** April 25, 2013  
**LDC Report Date:** June 26, 2013  
**Matrix:** Soil/Water  
**Parameters:** Total Petroleum Hydrocarbons as Gasoline  
**Validation Level:** Level IV  
**Laboratory:** Eurofins  
**Sample Delivery Group (SDG):** PH039

**Sample Identification**

TB-042513  
SL-519-SA7-SB-2.0-3.0



## Introduction

This data review covers one soil sample and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

## **III. Calibration Verification**

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-042513 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

Sample EB-042413 (from SDG PH035) was identified as an equipment blank. No total petroleum hydrocarbons as gasoline contaminants were found.

Sample FB-041113 (from SDG PH029) was identified as a field blank. No total petroleum hydrocarbons as gasoline contaminants were found.

## **V. Surrogate Recovery**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

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



## VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Target Compound Identification

All target compound identifications were within validation criteria.

## IX. Compound Quantitation

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 PH039	All compounds reported below the RL.	J (all detects)	A

## X. System Performance

The system performance was acceptable.

## XI. Overall Assessment of Data

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

## XII. Field Duplicates

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG PH039**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH039	TB-042513 SL-519-SA7-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG PH039**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG PH039**

No Sample Data Qualified in this SDG



**METHOD:** GC TPH as Gasoline (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/25/13
II.	Initial calibration	A	% RSD $\leq 20$
III.	Calibration verification/ICV	A	100/CCV $\leq 20$
IV.	Blanks	A	
V.	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	less 10
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	TB = 1 EB = EB-042413 (SDG # PH035) FB = FB-041113 (SDG # PH039)

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples:

SOIL + water

1	042513 TB-042413	11	BLK 5Z	21		31	
2	SL-519-SA7-SB-2.0-3.0	12	BLK 5W	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 #: 29836M7

## VALIDATION FINDINGS CHECKLIST

Page: 1 of 2  
Reviewer: FT  
2nd Reviewer: AMethod: ✓ GC        HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq$ 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq$ 20% or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



LDC #: 29834M7

## VALIDATION FINDINGS CHECKLIST

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

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field duplicates.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
XV. Field blanks				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field blanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



LDC #: 2983647

VALIDATION FINDINGS WORKSHEET  
Initial Calibration Calculation VerificationPage: 1 of 1  
Reviewer: F7  
2nd Reviewer: QX

METHOD: GC ✓ HPLC

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C

Average CF = sum of the CF/number of standards

%RSD =  $100 * (S/X)$ 

Where: A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported		Recalculated		Reported		Recalculated		Reported		Recalculated	
				CF (STD std)		CF (STD std)		Ave CF (initial)		Ave CF (initial)		%RSD		%RSD	
1	1CAL	1/12/12	GRD	6717		6717		6269		6269		9.2		9.2	
2	1CAL	7/23/12	GRD	62559		62559		62999		62999		3.7		3.7	
3															
4															

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



LDC #: 2983647

# VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: Q

METHOD: GC HPLC

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

% Difference =  $100 \times (\text{ave. CF} - \text{CF}) / \text{ave. CF}$       Where:      ave. CF = initial calibration average CF  
CF = continuing calibration CF  
A = Area of compound  
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(lcal)/ CCV Conc.	Reported		Recalculated	
					CF/ Conc. CCV	%D	CF/ Conc. CCV	%D
1	cen 10:42	5/11/13	GRU	550.0	562.51	2	562.51	2
2	cen 13:58	4/30/13	↓	220.00	224.51	2	224.51	2
3								
4								

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



VALIDATION FINDINGS WORKSHEET  
Surrogate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100  
Where: SF = Surrogate Found  
SS = Surrogate Spiked

Sample ID: # 2

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Trifluorotoluene	N3	900	736.4180	82	82	0

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference



LDC #: 2983647

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

## Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FJ

2nd Reviewer: C

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where SSC = Spiked sample concentration  
SA = Spike added

SC = Sample concentration

$$\text{RPD} = ((\text{SSCLCS} - \text{SSCLCSD}) * 2) / (\text{SSCLCS} + \text{SSCLCSD}) * 100$$

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS/LCSD

Compound	Spike Added (ug/L)		Sample Conc. (ug/L)	Spike Sample Concentration (ug/L)		LCS		LCSD		Percent Recovery		LCS		Percent Recovery		LCS		Percent Recovery		LCS/LCSD	
	LCS	LCSD		LCS	LCSD	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	1100	1100	ND	1073.17	1127.51			98	98	100	100	5	5								
Diesel (8015)																					
Benzene (8021B)																					
Methane (RSK-175)																					
2,4-D (8151)																					
Dinoseb (8151)																					
Naphthalene (8310)																					
Anthracene (8310)																					
HMX (8330)																					
2,4,6-Trinitrotoluene (8330)																					

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.







## **Laboratory Data Consultants, Inc. Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** April 24 through April 25, 2013  
**LDC Report Date:** June 24, 2013  
**Matrix:** Soil  
**Parameters:** Total Petroleum Hydrocarbons as Extractables  
**Validation Level:** Level IV  
**Laboratory:** Eurofins  
**Sample Delivery Group (SDG):** PH039

### **Sample Identification**

SL-507-SA7-SB-0.0-0.5  
SL-519-SA7-SB-0.0-0.5  
SL-819-SA7-SB-0.0-0.5  
SL-519-SA7-SB-2.0-3.0  
SL-509-SA7-SB-0.0-0.5  
SL-506-SA7-SB-0.0-0.5  
SL-508-SA7-SB-0.0-0.5  
SL-519-SA7-SB-0.0-0.5MS  
SL-519-SA7-SB-0.0-0.5MSD



## Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

## **III. Calibration Verification**

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractables contaminants were found in the method blanks.

Sample EB-042413 (from SDG PH035) was identified as an equipment blank. No total petroleum hydrocarbons as extractables contaminants were found.

Sample FB-041113 (from SDG PH029) was identified as a field blank. No total petroleum hydrocarbons as extractables contaminants were found.

## **V. Surrogate Recovery**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:



Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-519-SA7-SB-0.0-0.5MS/MSD (SL-519-SA7-SB-0.0-0.5)	Extractable fuel hydrocarbons (C8-C11) Extractable fuel hydrocarbons (C12-C14)	140 (49-123) 147 (49-123)	151 (49-123) 137 (49-123)	- -	J (all detects) J (all detects)	A

## VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS01120	Extractable fuel hydrocarbons (C30-C40)	63 (65-128)	All samples in SDG PH039	J (all detects) UJ (all non-detects)	P

## VIII. Target Compound Identification

All target compound identifications were within validation criteria.

## IX. 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 PH039	All compounds reported below the RL.	J (all detects)	A

## X. System Performance

The system performance was acceptable.

## XI. Overall Assessment of Data

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

## XII. Field Duplicates

Samples SL-519-SA7-SB-0.0-0.5 and SL-819-SA7-SB-0.0-0.5 were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:



Compound	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
Extractable fuel hydrocarbons (C12-C14)	2.5	5.2U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Extractable fuel hydrocarbons (C15-C20)	14	14	0 (≤50)	-	-
Extractable fuel hydrocarbons (C21-C30)	41	56	31 (≤50)	-	-
Extractable fuel hydrocarbons (C30-C40)	95	79	18 (≤50)	-	-
Extractable fuel hydrocarbons (C8-C11)	3.0	5.2U	200 (≤50)	J (all detects) UJ (all non-detects)	A



**Santa Susana Field Laboratory  
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -  
SDG PH039**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH039	SL-519-SA7-SB-0.0-0.5	Extractable fuel hydrocarbons (C8-C11) Extractable fuel hydrocarbons (C12-C14)	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	Extractable fuel hydrocarbons (C30-C40)	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)
PH039	SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5	Extractable fuel hydrocarbons (C12-C14)  Extractable fuel hydrocarbons (C8-C11)	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

**Santa Susana Field Laboratory  
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data  
Qualification Summary - SDG PH039**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory  
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification  
Summary - SDG PH039**

No Sample Data Qualified in this SDG



LDC #: 29836M8

**VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH039

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 6/5/13

Page: 1 of 1

Reviewer: FA2nd Reviewer: CA**METHOD:** GC TPH as Extractables (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/24 - 4/25/13
II.	Initial calibration	A	% PSD $\leq 20$
III.	Calibration verification/ICV	$\Delta$	ICV/CCV $\leq 20$
IV.	Blanks	$\Delta$	
V.	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	SW	LC5
VIII.	Target compound identification	$\Delta$	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	$\Delta$	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW	D = 2 + 3 PH035
XIII.	Field blanks	ND	EB = EB-042413 (SDG # 29836L) P FB = FB-041113 (SDG # 298 PH029 P)

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-507-SA7-SB-0.0-0.5	11	PBLK01120	21		31	
2	SL-519-SA7-SB-0.0-0.5	12		22		32	
3	SL-819-SA7-SB-0.0-0.5	13		23		33	
4	SL-519-SA7-SB-2.0-3.0	14		24		34	
5	SL-509-SA7-SB-0.0-0.5	15		25		35	
6	SL-506-SA7-SB-0.0-0.5	16		26		36	
7	SL-508-SA7-SB-0.0-0.5	17		27		37	
8	SL-519-SA7-SB-0.0-0.5MS	18		28		38	
9	SL-519-SA7-SB-0.0-0.5MSD	19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_



LDC #: 29836M8

## VALIDATION FINDINGS CHECKLIST

Page: 1 of 2  
Reviewer: FT  
2nd Reviewer: AMethod: GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq$ 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq$ 20% or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VIII. Laboratory control Samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



LDC #: 29836M8

## VALIDATION FINDINGS CHECKLIST

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

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field duplicates.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XV. Field blanks				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field blanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



METHOD: GC HPLC

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

~~Y N N/A~~

N/A

Y N/A

--	--

Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

[illegible]







LDC#: 2983618**VALIDATION FINDINGS WORKSHEET****Field Duplicates**Page: 1 of 1Reviewer: AB2nd Reviewer: C**METHOD:** GC TPH as Extractables (EPA SW 846 Method 8015B)Y N NA

Were field duplicate pairs identified in this SDG?

Y N NA

Were target analytes detected in the field duplicate pairs?

Compound	Concentration (mg/Kg)		RPD	
	<u>12</u>	<u>23</u>		
EFH (C12-C14)	2.5	5.2U	200	J/UJ/A
EFH (C15-C20)	14	14	0	
EFH (C21-C30)	41	56	31	
EFH (C30-C40)	95	79	18	
EFH (C8-C11)	3.0	5.2U	200	J/UJ/A



LDC #: 2983648

VALIDATION FINDINGS WORKSHEET  
Initial Calibration Calculation VerificationPage: 1 of 1  
Reviewer: F7  
2nd Reviewer: [Signature]

METHOD: GC HPLC

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C

Average CF = sum of the CF/number of standards

%RSD =  $100 * (S/X)$ 

Where: A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported		Recalculated		Reported		Recalculated		Reported		Recalculated	
				CF (std)	CF (std)	CF (std)	CF (std)	Ave CF (initial)	Ave CF (initial)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD	%RSD	%RSD
1	1CAL	4/9/13	TPF ECg - c40	23800.41	23800.41	23800.41	23800.41	23651.44	23651.44	23651.44	23651.44	7.938	7.938	7.938	7.938
2															
3															
4															

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



LDC #: 2983648

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Results Verification**

Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: CA

METHOD: GC \_\_\_\_\_ HPLC \_\_\_\_\_

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

$$\% \text{ Difference} = 100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$$

Where:    ave. CF = initial calibration average CF  
          CF = continuing calibration CF  
          A = Area of compound  
          C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(lcal)/ CCV Conc.	Reported		Recalculated	
					CF/ Conc. CCV	%D	CF/ Conc. CCV	%D
1	5/2/13 cal	5/2/13	cy-c40	288.01	283.46	2	283.46	2
	3:09							
2	cal 7.59	5/2/13	✓	↓	320.59	11	320.59	11
3								
4								

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



VALIDATION FINDINGS WORKSHEET  
Surrogate Results Verification

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate Spiked

Sample ID: H1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
chlorobenzene	MS	2.0	2.0326	102	102	0
orthoterphenyl	L	2.0	2.128269	106	106	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference



## VALIDATION FINDINGS WORKSHEET

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

**Where**

SSC = Spiked sample concentration

SA = Spike added

SC = Sample concentration

$$RPD = \left( \frac{\{SSCMS - SSCMSD\} * 2}{(SSCMS + SSCMSD)} \right) * 100$$

MS = Matrix spike

MSD = Matrix spike duplicate

MS/MSD samples: 8+9

[illegible]

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 #: 2983648

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

## Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FJ

2nd Reviewer: Q

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where SSC = Spiked sample concentration  
SA = Spike added

SC = Sample concentration

$$\text{RPD} = ((\text{SSCLCS} - \text{SSCLCSD}) * 2) / (\text{SSCLCS} + \text{SSCLCSD}) * 100$$

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 0112 U

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		LCS		LCSD		Percent Recovery		LCSD		Percent Recovery		RPD	
	LCS	LCSD		LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)																	
Diesel (8015)																	
Benzene (8021B)																	
Methane (RSK-175)																	
2,4-D (8151)																	
Dinoseb (8151)																	
Naphthalene (8310)																	
Anthracene (8310)																	
HMX (8330)																	
2,4,6-Trinitrotoluene (8330)																	
EPH (830-840)	5.01	NA	ND	3.13	NA	63	63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



METHOD: ☒ GC ☐ HPLC

Were all reported results recalculated and verified for all level IV samples?  
Were all recalculated results for detected target compounds within 10% of the reported results?

 ~~$\frac{Y}{Y} \frac{N}{N} \frac{N/A}{N/A}$~~ 

Concentration=  $\frac{(A)(F_V)(Df)}{(RF)(V_s \text{ or } W_s)(\%S/100)}$

Example: \_\_\_\_\_

Sample ID: #1

Compound Name c30 - c40

Concentration =  $\frac{158.33948}{(23651.44)} \times \frac{(1000)}{(30)} = (0.9640) (1000)$

[illegible]

Comments: \_\_\_\_\_



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** April 24 through April 25, 2013

**LDC Report Date:** June 6, 2013

**Matrix:** Soil

**Parameters:** Dioxins/Dibenzofurans

**Validation Level:** Level IV

**Laboratory:** Eurofins

**Sample Delivery Group (SDG):** PH039

**Sample Identification**

SL-507-SA7-SB-0.0-0.5  
SL-519-SA7-SB-0.0-0.5  
SL-819-SA7-SB-0.0-0.5  
SL-519-SA7-SB-2.0-3.0  
SL-509-SA7-SB-0.0-0.5  
SL-506-SA7-SB-0.0-0.5  
SL-508-SA7-SB-0.0-0.5  
SL-519-SA7-SB-0.0-0.5MS  
SL-519-SA7-SB-0.0-0.5MSD



## Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA 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 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
BLK123001	5/3/13	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 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	0.0477 ng/Kg 0.0263 ng/Kg 0.0789 ng/Kg 0.143 ng/Kg 0.0390 ng/Kg 0.0517 ng/Kg 0.0360 ng/Kg 0.0277 ng/Kg 0.0328 ng/Kg 0.0157 ng/Kg 0.0301 ng/Kg 0.0373 ng/Kg 0.125 ng/Kg	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5
BLK128001	5/8/13	1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 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	0.0260 ng/Kg 0.0224 ng/Kg 0.0332 ng/Kg 0.0475 ng/Kg 0.242 ng/Kg 0.0349 ng/Kg 0.0209 ng/Kg 0.0342 ng/Kg 0.0236 ng/Kg 0.0367 ng/Kg 0.0403 ng/Kg 0.0382 ng/Kg 0.0528 ng/Kg 0.136 ng/Kg	SL-519-SA7-SB-2.0-3.0

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-507-SA7-SB-0.0-0.5	1,2,3,7,8-PeCDD 1,2,3,4,7,8,9-HpCDF	0.177 ng/Kg 0.121 ng/Kg	0.177U ng/Kg 0.121U ng/Kg
SL-519-SA7-SB-0.0-0.5	1,2,3,7,8-PeCDD	0.205 ng/Kg	0.205U ng/Kg
SL-819-SA7-SB-0.0-0.5	1,2,3,7,8-PeCDD	0.210 ng/Kg	0.210U ng/Kg
SL-506-SA7-SB-0.0-0.5	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 2,3,4,7,8-PeCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0965 ng/Kg 0.130 ng/Kg 0.253 ng/Kg 0.107 ng/Kg 0.118 ng/Kg	0.0965U ng/Kg 0.130U ng/Kg 0.253U ng/Kg 0.107U ng/Kg 0.118U ng/Kg
SL-519-SA7-SB-2.0-3.0	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0778 ng/Kg 0.112 ng/Kg 0.118 ng/Kg 0.103 ng/Kg 0.0583 ng/Kg 0.0915 ng/Kg	0.0778U ng/Kg 0.112U ng/Kg 0.118U ng/Kg 0.103U ng/Kg 0.0583U ng/Kg 0.0915U ng/Kg



Samples EB-042413 (from SDG PH038) 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-042413	4/24/13	1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.282 pg/L 0.448 pg/L 0.854 pg/L 0.561 pg/L 0.409 pg/L 0.251 pg/L 0.255 pg/L 0.240 pg/L 0.178 pg/L 0.199 pg/L 0.191 pg/L 0.673 pg/L	All samples in SDG PH039

Sample FB-041113 (from SDG PH029) 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-041113	4/11/13	1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF OCDF	0.125 pg/L 0.134 pg/L 0.402 pg/L 0.298 pg/L 0.316 pg/L 0.324 pg/L 0.221 pg/L 0.211 pg/L 0.149 pg/L 0.254 pg/L 0.840 pg/L	All samples in SDG PH039

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

## VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-519-SA7-SB-0.0-0.5MS/MSD (SL-519-SA7-SB-0.0-0.5)	OCDD	30 (40-135)	-	-	J (all detects) UJ (all non-detects)	A



## VII. Laboratory Control Samples (LCS)

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

## VIII. Regional Quality Assurance and Quality Control

Not applicable.

## IX. Internal Standards

All internal and recovery standard recoveries were within QC limits.

## X. Target Compound Identifications

All target compound identifications were within validation criteria.

## XI. Compound Quantitation

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDGPH039	All compounds reported below the RL.	J (all detects)	A

## XII. System Performance

The system performance was acceptable.

## XIII. Overall Assessment of Data

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

## XIV. Field Duplicates

Samples SL-519-SA7-SB-0.0-0.5 and SL-819-SA7-SB-0.0-0.5 were identified as field duplicates. No polychlorinated dioxins/dibenzofurans were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/Kg)		RPD (Limits)	Flag	A or P
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
2,3,7,8-TCDD	0.0651	0.0291	76 (≤50)	J (all detects)	A



Compound	Concentration (ng/Kg)		RPD (Limits)	Flag	A or P
	SL-519-SA7-SB-0.0-0.5	SL-819-SA7-SB-0.0-0.5			
1,2,3,7,8-PeCDD	0.205	0.210	2 (≤50)	-	-
1,2,3,4,7,8-HxCDD	0.276	0.317	14 (≤50)	-	-
1,2,3,6,7,8-HxCDD	1.02	0.728	33 (≤50)	-	-
1,2,3,7,8,9-HxCDD	0.691	0.654	6 (≤50)	-	-
1,2,3,4,6,7,8-HpCDD	25.2	17.1	38 (≤50)	-	-
OCDD	270	174	43 (≤50)	-	-
2,3,7,8-TCDF	0.365	0.184	66 (≤50)	J (all detects)	A
1,2,3,7,8-PeCDF	0.711	0.577	21 (≤50)	-	-
2,3,4,7,8-PeCDF	0.495	0.484	2 (≤50)	-	-
1,2,3,4,7,8-HxCDF	0.486	0.435	11 (≤50)	-	-
1,2,3,6,7,8-HxCDF	0.299	0.307	3 (≤50)	-	-
2,3,4,6,7,8-HxCDF	0.303	0.284	6 (≤50)	-	-
1,2,3,7,8,9-HxCDF	0.114	0.108	5 (≤50)	-	-
1,2,3,4,6,7,8-HpCDF	2.91	3.38	15 (≤50)	-	-
1,2,3,4,7,8,9-HpCDF	0.344	0.298	14 (≤50)	-	-
OCDF	7.75	13.7	55 (≤50)	J (all detects)	A



**Santa Susana Field Laboratory**  
**Dioxins/Dibenzofurans - Data Qualification Summary - SDG PH039**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH039	SL-519-SA7-SB-0.0-0.5	OCDD	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH039	SL-507-SA7-SB-0.0-0.5 SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5 SL-519-SA7-SB-2.0-3.0 SL-509-SA7-SB-0.0-0.5 SL-506-SA7-SB-0.0-0.5 SL-508-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)
PH039	SL-519-SA7-SB-0.0-0.5 SL-819-SA7-SB-0.0-0.5	2,3,7,8-TCDD 2,3,7,8-TCDF OCDF	J (all detects)	A	Field duplicates (RPD) (FD)

**Santa Susana Field Laboratory**  
**Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG PH039**

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
PH039	SL-507-SA7-SB-0.0-0.5	1,2,3,7,8-PeCDD 1,2,3,4,7,8,9-HpCDF	0.177U ng/Kg 0.121U ng/Kg	A	B
PH039	SL-519-SA7-SB-0.0-0.5	1,2,3,7,8-PeCDD	0.205U ng/Kg	A	B
PH039	SL-819-SA7-SB-0.0-0.5	1,2,3,7,8-PeCDD	0.210U ng/Kg	A	B
PH039	SL-506-SA7-SB-0.0-0.5	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 2,3,4,7,8-PeCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0965U ng/Kg 0.130U ng/Kg 0.253U ng/Kg 0.107U ng/Kg 0.118U ng/Kg	A	B
PH039	SL-519-SA7-SB-2.0-3.0	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0778U ng/Kg 0.112U ng/Kg 0.118U ng/Kg 0.103U ng/Kg 0.0583U ng/Kg 0.0915U ng/Kg	A	B

**Santa Susana Field Laboratory**  
**Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG PH039**

No Sample Data Qualified in this SDG



LDC #: 29836M21

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH039

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 6-5-13

Page: 1 of 1

Reviewer: Qm2nd Reviewer: Q**METHOD:** HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/24/13 → 4/25/13
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	<del>≤ 20/35</del> <sup>20</sup> <del>7.1258 ± 80</del> <sup>20</sup> ≤ 20/35
IV.	Continuing Calibration	A	<del>QC limit ± 5</del> <sup>20</sup> <del>100 ± 23</del> <sup>20</sup> <del>100/100</del> <sup>20</sup> <del>QC Limit</del>
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	A	
XI.	Compound quantitation/ <del>RL/LOQ/LODs</del>	SW	
XII.	System performance	A	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N/SW	D = 2 + 3
XV.	Field blanks	SW	EB = EB-042413 (PH038) ; FB = FB-041113 (PH022)

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-507-SA7-SB-0.0-0.5	11		21		31	
2	SL-519-SA7-SB-0.0-0.5	12		22		32	
3	SL-819-SA7-SB-0.0-0.5	13		23		33	
4	SL-519-SA7-SB-2.0-3.0	14		24		34	
5	SL-509-SA7-SB-0.0-0.5	15		25		35	
6	SL-506-SA7-SB-0.0-0.5	16		26		36	
7	SL-508-SA7-SB-0.0-0.5	17		27		37	
8	SL-519-SA7-SB-0.0-0.5MS	18		28		38	
9	SL-519-SA7-SB-0.0-0.5MSD	19		29	BLK 123001	39	
10		20		30	BLK 128001	40	

Notes:



**Method:** Dioxins/Dibenzofurans (EPA Method 1613B)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
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?	/			
<b>III. Initial calibration</b>				
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?	/			
<b>IV. Continuing calibration</b>				
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?	/			
<b>V. Blanks</b>				
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?	/			
<b>VI. Matrix spike/Matrix spike duplicates</b>				
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?		/		
<b>VII. Laboratory control samples</b>				
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 FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
<b>VIII. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>IX. Internal standards</b>				
Were internal standard recoveries within the 25-150% criteria?	/			
Was the minimum S/N ratio of all internal standard peaks $\geq 10$ ?	/			
<b>X. Target compound identification</b>				
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 $\geq 2.5$ ?	/			
Does the maximum intensity of each specified characteristic ion coincide within $\pm 2$ seconds (includes labeled standards)?	/			
For PCDF identification, was any signal ( $S/N \geq 2.5$ , at $\pm$ seconds RT) detected in the corresponding PCDF channel?		/		
Was an acceptable lock mass recorded and monitored?	/			
<b>XI. Compound quantitation/CRQLs</b>				
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?	/			
<b>XII. System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
<b>XV. Field blanks</b>				
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: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## Blanks

**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".

	Yes	No	N/A
Were all samples associated with a method blank?	<input checked="" type="radio"/> N	<input type="radio"/> N/A	
Was a method blank performed for each matrix and whenever a sample extraction was performed?	<input checked="" type="radio"/> N	<input type="radio"/> N/A	
Was method blank contamination less < CRQL for all target compounds?	<input checked="" type="radio"/> N	<input type="radio"/> N/A	

	Blank extraction date:	Blank analysis date:	Associated samples:	Qual U (B)
	05/03/13	05/06/13	1-3, 5-7	

**Conc. units:**            ng/kg

[illegible]

**\*EMPC**



## Blanks

**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?

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: 05/08/13

Blank analysis date: 05/09/13

Conc. units: ~~mg/g~~ ng/Kg *cs*

Associated samples: 4 Qual U (B)

[illegible]

**\*EMPC**



## VALIDATION FINDINGS WORKSHEET

## Field Blanks

Page: 2 of 2  
Reviewer: SM  
2nd Reviewer: Q

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

Blank units: pg/L Associated sample units: ng/kg

Sampling date: 04/24/13

Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All &gt;5x

Compound	Blank ID	5X	Sample Identification									
	EB-042413											
E	0.282*	1.41										
F	0.448	2.24										
G	0.854*	4.27										
I	0.561*	2.805										
J	0.409*	2.045										
K	0.251	1.255										
L	0.255	1.275										
N	0.240	1.2										
M	0.178	0.89										
O	0.199*	0.995										
P	0.191*	0.955										
Q	0.673*	3.365										

\* EMPC

EB-042413 (PH038)

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:  
All contaminants within five times the blank concentration were qualified as not detected, "U".

V:\Field Blanks\29836M21\_EB.wpd



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

Blank units: pg/L Associated sample units: ng/kg

Sampling date: 04/11/13

Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: All &gt;5x

Compound	Blank ID	Sample Identification									
	FB-041113	5X									
C	0.125	0.625									
E	0.134*	0.67									
F	0.402*	2.01									
I	0.398*	1.99									
J	0.316*	1.58									
K	0.324	1.62									
L	0.221	1.105									
N	0.211*	1.055									
M	0.149	0.745									
O	0.254*	1.27									
Q	0.840*	4.2									

\* EMPC

FB-041113

(PH029)

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:  
All contaminants within five times the blank concentration were qualified as not detected, "U".

V:\Field Blanks\29836M21\_FB.wpd



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

Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

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?

[illegible]



LDC#: 29836M2**VALIDATION FINDINGS WORKSHEET**  
**Field Duplicates**Page: 1 of 1  
Reviewer: [Signature]  
2nd Reviewer: \_\_\_\_\_**METHOD:** HRGC/HRMS Semivolatiles (EPA Method 1613B)Y N NA  
Y N NA

Were field duplicate pairs identified in this SDG?

Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ng/kg)		RPD (<50%)	Qualifications (Parent Only)
	2	3		
A	0.0651*	0.0291*	76	Jdets/A (FD)
B	0.205*	0.210*	2	--
C	0.276*	0.317	14	--
D	1.02	0.728	33	--
E	0.691	0.654	6	--
F	25.2	17.1	38	--
G	270	174	43	--
H	0.365*	0.184*	66	Jdets/A (FD)
I	0.711	0.577*	21	--
J	0.495*	0.484*	2	--
K	0.486	0.435	11	--
L	0.299*	0.307*	3	--
M	0.303	0.284	6	--
N	0.114*	0.108*	5	--
O	2.91	3.38	15	--
P	0.344	0.298*	14	--
Q	7.75	13.7	55	Jdets/A (FD)

P:\FD %RPD Q.wpd

v:\Field Duplicates\29836M21



# VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

**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:

$$\text{RRF} = (A_s)(C_{is}) / (A_{is})(C_s)$$

average RRF = sum of the RRFs/number of standards  
%RSD =  $100 * (S/X)$

$A_s$  = Area of compound,  
 $C_s$  = Concentration of compound,  
 $S$  = Standard deviation of the RRFs,  
 $X$  = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				Average RRF (initial)	Average RRF (initial)	RRF (CS3 std)	RRF (CS3 std)	%RSD	%RSD
1	ICAL	3-22-13	2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)	1.043	1.043	1.025	1.024	5.23	5.24
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)	1.207	1.207	1.182	1.182	9.04	9.04
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)	0.957	0.9575	0.947	0.947	2.62	2.62
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8-HpCDD)	1.048	1.048	1.028	1.028	3.46	3.47
			OCDF ( <sup>13</sup> C-OCDF)	0.933	0.933	0.920	0.920	5.76	5.76
2			2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8-HpCDD)						
			OCDF ( <sup>13</sup> C-OCDF)						
3			2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8-HpCDD)						
			OCDF ( <sup>13</sup> C-OCDF)						

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



# **VALIDATION FINDINGS WORKSHEET** **Routine Calibration Results Verification**

Page: 1 of 1  
 Reviewer: dm  
 2nd Reviewer: a

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

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

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_s)(C_{is}) / (A_{is})(C_s)$$

Where: ave. RRF = initial calibration average RRF  
 RRF = continuing calibration RRF  
 $A_s$  = Area of compound,  
 $C_s$  = Concentration of compound,

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

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Spiked Conc (ng/mL)	Reported	Recalculated	Reported	Recalculated
					Conc (ng/mL)	Conc (ng/mL)	%R	%R
1	CS3C002	5-6-13	2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)	10	9.97	9.97	100	100
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)	10	9.32	9.32	93	93
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)	50	52.2	52.2	104	104
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8-HpCDD)	50	52.23	52.22	104	104
			OCDF ( <sup>13</sup> C-OCDF)	100	105.16	105.15	105	105
2	CS3C004	5-7-13	2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)	10	10.01	10.01	100	100
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)	10	9.34	9.34	93	93
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)	50	52.62	52.64	105	105
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8-HpCDD)	50	52.43	52.42	105	105
			OCDF ( <sup>13</sup> C-OCDF)	100	106.4	106.4	106	106
3	CS3C002	5-9-13	2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)	10	9.94	9.94	99	99
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)	10	9.59	9.59	96	96
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)	50	52.79	52.81	106	106
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8-HpCDD)	50	52.05	52.04	104	104
			OCDF ( <sup>13</sup> C-OCDF)	100	105.11	105.11	105	105

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.



## Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1  
Reviewer: SPM  
2nd Reviewer: Y

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

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SSR} - \text{SR}) / \text{SA}$$

Where: SSR = Spiked sample result, SR = Sample result  
SA = Spike added

$$RPD = |MSR - MSDR| * 2 / (MSR + MSDR)$$

MSR = Matrix spike percent recovery      MSDR = Matrix spike duplicate percent recovery

MS/MSD samples: 89

[illegible]

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



## **VALIDATION FINDINGS WORKSHEET**

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

% Recovery =  $100 \times \text{SSC}/\text{SA}$   
Where: SSC = Spiked sample concentration  
SA = Spike added

LCSD = Laboratory control sample duplicate percent recovery

[illegible]

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.



## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

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

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

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

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

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

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

$V_o$  = 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. 4, Q:

$$\text{Conc.} = \frac{(5742 + 4865)}{(1566313 + 1423088)} \cdot (4000) \cdot (1) \cdot (0.933) \cdot (10.22) \cdot (0.966)$$

$$= 1.54 \text{ ng/kg}$$
[illegible]



## **Attachment I**

### **Sample ID Cross Reference and Data Review Level**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Apr-2013	SL-543A-SA7-SB-0.0-0.5	7037614	N	3546	8082A	III
25-Apr-2013	SL-543B-SA7-SB-0.0-0.5	7037615	N	3546	8082A	III
25-Apr-2013	SL-543C-SA7-SB-0.0-0.5	7037616	N	3546	8082A	III
25-Apr-2013	SL-543D-SA7-SB-0.0-0.5	7037617	N	3546	8082A	III
26-Apr-2013	TB-042613	7037618	TB	5030B	8015M	III
26-Apr-2013	SL-562-SA7-SB-0.0-0.5	7037619	N	3050B	6010C	III
26-Apr-2013	SL-562-SA7-SB-0.0-0.5	7037619	N	3050B	6020A	III
26-Apr-2013	SL-562-SA7-SB-0.0-0.5	7037619	N	3546	8015M	III
26-Apr-2013	SL-562-SA7-SB-0.0-0.5	7037619	N	3546	8082A	III
26-Apr-2013	SL-562-SA7-SB-0.0-0.5	7037619	N	3546	8270D SIM	III
26-Apr-2013	SL-562-SA7-SB-0.0-0.5	7037619	N	METHOD	1613B	III
26-Apr-2013	SL-562-SA7-SB-0.0-0.5	7037619	N	METHOD	7471B	III
26-Apr-2013	SL-562-SA7-SB-2.0-3.0	7037620	N	3050B	6010C	III
26-Apr-2013	SL-562-SA7-SB-2.0-3.0	7037620	N	3050B	6020A	III
26-Apr-2013	SL-562-SA7-SB-2.0-3.0	7037620	N	3546	8015M	III
26-Apr-2013	SL-562-SA7-SB-2.0-3.0	7037620	N	3546	8082A	III
26-Apr-2013	SL-562-SA7-SB-2.0-3.0	7037620	N	3546	8270D SIM	III
26-Apr-2013	SL-562-SA7-SB-2.0-3.0	7037620	N	5035A	8015M	III
26-Apr-2013	SL-562-SA7-SB-2.0-3.0	7037620	N	METHOD	1613B	III
26-Apr-2013	SL-562-SA7-SB-2.0-3.0	7037620	N	METHOD	7471B	III



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 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	0.665	J	0.509	MDL	4.07	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.491	J	0.0681	MDL	1.02	PQL	mg/Kg	J	Z
BORON	10.9		0.844	MDL	10.2	PQL	mg/Kg	U	F
CADMIUM	0.270	J	0.0336	MDL	1.02	PQL	mg/Kg	J	Z
CALCIUM	3400		4.09	MDL	20.3	PQL	mg/Kg	J	E
COBALT	4.54		0.0915	MDL	1.02	PQL	mg/Kg	J	E
LEAD	10.5		0.478	MDL	3.05	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.278	J	0.173	MDL	2.03	PQL	mg/Kg	U	F
NICKEL	9.24		0.112	MDL	2.03	PQL	mg/Kg	J	A
PHOSPHORUS	427		0.519	MDL	10.2	PQL	mg/Kg	J	A, E
POTASSIUM	3300		13.7	MDL	102	PQL	mg/Kg	J	Q
SODIUM	71.9	J	17.0	MDL	102	PQL	mg/Kg	U	F
TIN	2.82	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.87	J	0.844	MDL	5.09	PQL	mg/Kg	J	Z

Sample ID: SL-562-SA7-SB-2.0-3.0

Collected: 4/26/2013 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	0.557	J	0.515	MDL	4.12	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.487	J	0.0690	MDL	1.03	PQL	mg/Kg	J	Z
BORON	9.62	J	0.855	MDL	10.3	PQL	mg/Kg	U	F
CADMIUM	0.399	J	0.0340	MDL	1.03	PQL	mg/Kg	J	Z
CALCIUM	3250		4.14	MDL	20.6	PQL	mg/Kg	J	E
COBALT	4.50		0.0927	MDL	1.03	PQL	mg/Kg	J	E
LEAD	15.8		0.484	MDL	3.09	PQL	mg/Kg	J	Q, E
MOLYBDENUM	0.334	J	0.175	MDL	2.06	PQL	mg/Kg	U	F
NICKEL	13.8		0.113	MDL	2.06	PQL	mg/Kg	J	A
PHOSPHORUS	370		0.525	MDL	10.3	PQL	mg/Kg	J	A, E
POTASSIUM	3150		13.9	MDL	103	PQL	mg/Kg	J	Q
SODIUM	73.0	J	17.2	MDL	103	PQL	mg/Kg	U	F
TIN	2.92	J	0.227	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.56	J	0.855	MDL	5.15	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 8:25:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.102	MDL	0.407	PQL	mg/Kg	J	Z

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 8:25:00

Analysis Type: RES/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0337	J	0.0203	MDL	0.203	PQL	mg/Kg	J	Z

Sample ID: SL-562-SA7-SB-2.0-3.0

Collected: 4/26/2013 9:20:00

Analysis Type: REA/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.145	J	0.103	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-562-SA7-SB-2.0-3.0

Collected: 4/26/2013 9:20:00

Analysis Type: RES/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0694	J	0.0206	MDL	0.206	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 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	0.0118	J	0.0098	MDL	0.0163	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 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
1,2,3,4,7,8,9-HPCDF	0.570	JB	0.0555	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.56	JB	0.0804	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.813	JB	0.0513	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	4.50	J	0.0822	MDL	5.09	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 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
1,2,3,6,7,8-HXCDF	0.584	JB	0.0482	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.84	J	0.0719	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.740	JB	0.0621	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.557	JB	0.0364	MDL	5.09	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.560	JB	0.0426	MDL	5.09	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.677	JB	0.0374	MDL	5.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.140	JQ	0.0255	MDL	1.02	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.192	JQ	0.0409	MDL	1.02	PQL	ng/Kg	J	Z

Sample ID: SL-562-SA7-SB-2.0-3.0

Collected: 4/26/2013 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	1.64	JB	0.0705	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.54	JB	0.0601	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.77	JB	0.0604	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.49	JB	0.0594	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.27	J	0.0580	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.745	JB	0.0617	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.735	JB	0.0657	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.995	JB	0.0669	MDL	5.01	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.52	JB	0.0604	MDL	5.01	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.79	JB	0.0634	MDL	5.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.116	J	0.0266	MDL	1.00	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.830	J	0.0983	MDL	1.00	PQL	ng/Kg	J	Z

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 8:25:00

Analysis Type: RES

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	130		21	MDL	52	PQL	mg/Kg	J	L

\* denotes a non-reportable result

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## Data Qualifier Summary

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-562-SA7-SB-2.0-3.0

Collected: 4/26/2013 9:20:00

Analysis Type: REA

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	220		21	MDL	51	PQL	mg/Kg	J	L

**Method Category:** SVOA

**Method:** 8082A

**Matrix:** SO

Sample ID: SL-543A-SA7-SB-0.0-0.5

Collected: 4/25/2013 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
Aroclor 5432	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5442	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5460	33	U	10	MDL	33	PQL	ug/Kg	UJ	E

Sample ID: SL-543B-SA7-SB-0.0-0.5

Collected: 4/25/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5442	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5460	33	U	10	MDL	33	PQL	ug/Kg	UJ	E

Sample ID: SL-543C-SA7-SB-0.0-0.5

Collected: 4/25/2013 2:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5442	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5460	33	U	10	MDL	33	PQL	ug/Kg	UJ	E

Sample ID: SL-543D-SA7-SB-0.0-0.5

Collected: 4/25/2013 3:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5442	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5460	33	U	10	MDL	33	PQL	ug/Kg	UJ	E

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

**Method Category:** SVOA

**Method:** 8082A

**Matrix:** SO

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 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
Aroclor 5432	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5442	34	U	10	MDL	34	PQL	ug/Kg	UJ	E
Aroclor 5460	34	U	10	MDL	34	PQL	ug/Kg	UJ	E

Sample ID: SL-562-SA7-SB-2.0-3.0

Collected: 4/26/2013 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
Aroclor 5432	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5442	33	U	10	MDL	33	PQL	ug/Kg	UJ	E
Aroclor 5460	33	U	10	MDL	33	PQL	ug/Kg	UJ	E

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-562-SA7-SB-0.0-0.5

Collected: 4/26/2013 8:25:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	12	J	6.9	MDL	17	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	9.8	J	6.9	MDL	17	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.9	J	6.9	MDL	17	PQL	ug/Kg	J	Z
CHRYSENE	16	J	3.5	MDL	17	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	7.8	J	6.9	MDL	17	PQL	ug/Kg	J	Z
PHENANTHRENE	12	J	6.9	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-562-SA7-SB-2.0-3.0

Collected: 4/26/2013 9:20:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	7.9	J	6.9	MDL	17	PQL	ug/Kg	J	Z
BENZO(E)PYRENE	100	J	34	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	150	J	62	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	15	J	6.9	MDL	17	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	15	J	6.9	MDL	17	PQL	ug/Kg	J	Z
PYRENE	13	J	6.9	MDL	17	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

\* denotes a non-reportable result

**Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7**

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## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

### **Reason Code Legend**

<b><i>Reason Code</i></b>	<b><i>Description</i></b>
<b>*#</b>	Professional Judgment
A	ICP Serial Dilution
B	Method Blank Contamination
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH040



## Method Blank Outlier Report

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

<b>Method:</b> 1613B <b>Matrix:</b> SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1230B372212	5/6/2013 10:12:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0789 ng/Kg 0.0301 ng/Kg 0.0373 ng/Kg 0.0263 ng/Kg 0.0360 ng/Kg 0.0277 ng/Kg 0.0157 ng/Kg 0.0477 ng/Kg 0.0390 ng/Kg 0.0328 ng/Kg 0.0517 ng/Kg 0.143 ng/Kg 0.125 ng/Kg	SL-562-SA7-SB-0.0-0.5 SL-562-SA7-SB-2.0-3.0

<b>Method:</b> 6010C <b>Matrix:</b> SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P12237AB221100	5/3/2013 11:00:00 AM	PHOSPHORUS TIN	1.44 mg/Kg 1.47 mg/Kg	SL-562-SA7-SB-0.0-0.5 SL-562-SA7-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-562-SA7-SB-0.0-0.5(RES/TOT)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-562-SA7-SB-2.0-3.0(RES/TOT)	TIN	2.92 mg/Kg	2.92U mg/Kg



# Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C  
Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB-042413(RES)	4/24/2013 3:00:00 PM	BORON SODIUM TIN	0.0319 mg/L 0.228 mg/L 0.0035 mg/L	SL-543A-SA7-SB-0.0-0.5 SL-543B-SA7-SB-0.0-0.5 SL-543C-SA7-SB-0.0-0.5 SL-543D-SA7-SB-0.0-0.5 SL-562-SA7-SB-0.0-0.5 SL-562-SA7-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-562-SA7-SB-0.0-0.5(RES/TOT)	BORON	10.9 mg/Kg	10.9U mg/Kg
SL-562-SA7-SB-0.0-0.5(RES/TOT)	SODIUM	71.9 mg/Kg	71.9U mg/Kg
SL-562-SA7-SB-2.0-3.0(RES/TOT)	BORON	9.62 mg/Kg	9.62U mg/Kg
SL-562-SA7-SB-2.0-3.0(RES/TOT)	SODIUM	73.0 mg/Kg	73.0U mg/Kg



# Field Blank Outlier Report

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PrepPH040

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6010C  
Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-543A-SA7-SB-0.0-0.5 SL-543B-SA7-SB-0.0-0.5 SL-543C-SA7-SB-0.0-0.5 SL-543D-SA7-SB-0.0-0.5 SL-562-SA7-SB-0.0-0.5 SL-562-SA7-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-562-SA7-SB-0.0-0.5(RES/TOT)	MOLYBDENUM	0.278 mg/Kg	0.278U mg/Kg
SL-562-SA7-SB-2.0-3.0(RES/TOT)	MOLYBDENUM	0.334 mg/Kg	0.334U mg/Kg



# Surrogate Outlier Report

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PH040\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8082A

Matrix: SO

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
SL-543A-SA7-SB- 0.0-0.5	TETRACHLORO-M-XYLENE	122	45.00-120.00	All Target Analytes	J (all detects)



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PH040\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31201AQ320351A (SL-562-SA7-SB-0.0-0.5 SL-562-SA7-SB-2.0-3.0)	EFH (C30-C40)	63	-	65.00-128.00	-	EFH (C30-C40)	J (all detects) UJ (all non-detects)

Method: 8082A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31207AY240140A (SL-543A-SA7-SB-0.0-0.5 SL-543B-SA7-SB-0.0-0.5 SL-543C-SA7-SB-0.0-0.5 SL-543D-SA7-SB-0.0-0.5 SL-562-SA7-SB-0.0-0.5 SL-562-SA7-SB-2.0-3.0)	Aroclor 5442	-	-	36.00-106.00	40 (30.00)	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects) UJ(all non-detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

6/26/2013 11:37:58 AM

ADR version 1.7.0.207

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PH040\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-562-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.570	5.09	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.56	5.09	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.813	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	4.50	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.584	5.09	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	J	2.84	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.740	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.557	5.09	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.560	5.09	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.677	5.09	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.140	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.192	1.02	PQL	ng/Kg	
SL-562-SA7-SB-2.0-3.0	1,2,3,4,7,8,9-HPCDF	JB	1.64	5.01	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.54	5.01	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	1.77	5.01	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	1.49	5.01	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	J	3.27	5.01	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.745	5.01	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.735	5.01	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.995	5.01	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	1.52	5.01	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.79	5.01	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.116	1.00	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.830	1.00	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-562-SA7-SB-0.0-0.5	ANTIMONY	J	0.665	4.07	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.491	1.02	PQL	mg/Kg	
	CADMIUM	J	0.270	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.278	2.03	PQL	mg/Kg	
	SODIUM	J	71.9	102	PQL	mg/Kg	
	TIN	J	2.82	10.2	PQL	mg/Kg	
	Zirconium	J	2.87	5.09	PQL	mg/Kg	
SL-562-SA7-SB-2.0-3.0	ANTIMONY	J	0.557	4.12	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.487	1.03	PQL	mg/Kg	
	BORON	J	9.62	10.3	PQL	mg/Kg	
	CADMIUM	J	0.399	1.03	PQL	mg/Kg	
	MOLYBDENUM	J	0.334	2.06	PQL	mg/Kg	
	SODIUM	J	73.0	103	PQL	mg/Kg	
	TIN	J	2.92	10.3	PQL	mg/Kg	
	Zirconium	J	2.56	5.15	PQL	mg/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH040

Laboratory: LL

EDD Filename: PH040\_v1

eQAPP Name: CDM\_SSFL\_130621\_Lan

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-562-SA7-SB-0.0-0.5	SELENIUM	J	0.143	0.407	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0337	0.203	PQL	mg/Kg	
SL-562-SA7-SB-2.0-3.0	SELENIUM	J	0.145	0.412	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0694	0.206	PQL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-562-SA7-SB-0.0-0.5	MERCURY	J	0.0118	0.0163	PQL	mg/Kg	J (all detects)

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-562-SA7-SB-0.0-0.5	BENZO(A)PYRENE	J	12	17	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	9.8	17	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	7.9	17	PQL	ug/Kg	
	CHRYSENE	J	16	17	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	7.8	17	PQL	ug/Kg	
	PHENANTHRENE	J	12	17	PQL	ug/Kg	
SL-562-SA7-SB-2.0-3.0	BENZO(A)ANTHRACENE	J	7.9	17	PQL	ug/Kg	J (all detects)
	BENZO(E)PYRENE	J	100	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	150	190	PQL	ug/Kg	
	FLUORANTHENE	J	15	17	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	15	17	PQL	ug/Kg	
	PYRENE	J	13	17	PQL	ug/Kg	



LDC #: 29836N4

## VALIDATION COMPLETENESS WORKSHEET

Date: 6/11/13

SDG #: PH040

ADR

Page: 1 of 1

Laboratory: Eurofins Lancaster Laboratories

Reviewer: or

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: 4/26/13
II.	ICP/MS Tune	-	
III.	Calibration	-	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	-	
VI.	Matrix Spike Analysis	N	MS/D (from PH039)
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	(from PH039) (Ni, P: J/VJ)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	-	
XV.	Field Blanks	SW	EB = EB-042413 (PH038) FB = FB-041113 (PH029)

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: 5

1	SL-562-SA7B-SB-0.0-0.5	11		21		31	
2	SL-562-SA7B-SB-2.0-3.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_



LDC #: 29836N4

VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: mg/L Associated sample units: mg/Kg Reason: F  
Sampling date: EB=4/24/13 FB=4/11/13 Soil factor applied 100X  
Field blank type: (circle one) Field Blank / Rinsate / Other: All Associated Samples: All

Analyte	Blank ID	Blank ID	Action Limit	1	2	Sample Identification									
	EB-042413	FB-041113													
B	0.0319		15.95	10.9	9.6										
Cu		0.0036	1.8												
Mo		0.0036	1.8	0.28	0.33										
Na	0.228		114	71.9	73.0										
Sn	0.0035		1.75												

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".

Page: 1 of 1  
Reviewer: [Signature]  
2nd Reviewer: [Signature]





## Laboratory Data Consultants, Inc.

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Web [www.lab-data.com](http://www.lab-data.com)

Fax 760.634.0439

CDM  
555 17th Street, Suite 1100  
Denver, CO 80202  
ATTN: Mrs. Cherie Zakowski

July 29, 2013

SUBJECT: Santa Susana Field Laboratory, Data Validation

Dear Mrs. Zakowski,

Enclosed is the final validation report for the fractions listed below. These SDGs were received on July 10, 2013.

### LDC project# 30022:

<u>SDG #</u>	<u>Fraction</u>
PH045, PH046, PH049	Semivolatiles (EPA SW 846 Method 8270D-SIM) Chlorinated Pesticides (EPA SW 846 Method 8081B) PCBs (EPA SW 846 Method 8082A) Metals (EPA SW 846 Method 6010C/6020A/7471A/7470A) TPH-G (EPA SW 846 Method 8015M) TPH-E (EPA SW 846 Method 8015M) Dioxins/Dibenzofurans (EPA Method 1613B)

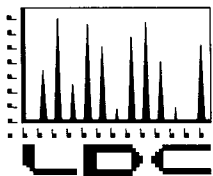
The following deliverables are submitted under this report:

- Attachment I Sample ID Cross Reference and Data Review Level
- Attachment II Overall Data Qualification Summary
- Enclosure I Level III ADR Outliers (including manual review outliers)
- Enclosure II Level IV Validation Reports

The data validation was performed in accordance to the Quality Assurance Project Plan for Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4), USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005), and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience. The following items were evaluated during the review:

- Holding Times
- Sample Preservation
- Cooler Temperatures
- Initial Calibration (Level IV only)
- Continuing Calibration (Level IV only)





- Blanks
- Surrogates
- Matrix Spike/Matrix Spike Duplicates
- Laboratory Duplicates
- Laboratory Control Samples
- Internal Standards (Level IV only)
- ICP Serial Dilution (Manual Review)
- Detection and Quantitation Limits
- Field QC Samples

Please feel free to contact us if you have any questions.

Sincerely,

Shauna McKellar  
Project Manager/Chemist



## **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-Jun-2013	TB-060313	7079478	TB	5030B	8015M	III
03-Jun-2013	SL-533-SA7-SB-2.5-3.5	7079477	N	3050B	6010C	III
03-Jun-2013	SL-533-SA7-SB-2.5-3.5	7079477	N	3050B	6020A	III
03-Jun-2013	SL-533-SA7-SB-2.5-3.5	7079477	N	3546	8015M	III
03-Jun-2013	SL-533-SA7-SB-2.5-3.5	7079477	N	3546	8082A	III
03-Jun-2013	SL-533-SA7-SB-2.5-3.5	7079477	N	3546	8270D SIM	III
03-Jun-2013	SL-533-SA7-SB-2.5-3.5	7079477	N	5035A	8015M	III
03-Jun-2013	SL-533-SA7-SB-2.5-3.5	7079477	N	METHOD	1613B	III
03-Jun-2013	SL-533-SA7-SB-2.5-3.5	7079477	N	METHOD	7471B	III
03-Jun-2013	SL-532-SA7-SB-3.0-4.0	7079476	N	3050B	6010C	III
03-Jun-2013	SL-532-SA7-SB-3.0-4.0	7079476	N	3050B	6020A	III
03-Jun-2013	SL-532-SA7-SB-3.0-4.0	7079476	N	3546	8015M	III
03-Jun-2013	SL-532-SA7-SB-3.0-4.0	7079476	N	3546	8082A	III
03-Jun-2013	SL-532-SA7-SB-3.0-4.0	7079476	N	3546	8270D SIM	III
03-Jun-2013	SL-532-SA7-SB-3.0-4.0	7079476	N	5035A	8015M	III
03-Jun-2013	SL-532-SA7-SB-3.0-4.0	7079476	N	METHOD	1613B	III
03-Jun-2013	SL-532-SA7-SB-3.0-4.0	7079476	N	METHOD	7471B	III
03-Jun-2013	SL-526-SA7-SB-9.0-10.0	7079475	N	3050B	6010C	III
03-Jun-2013	SL-526-SA7-SB-9.0-10.0	7079475	N	3050B	6020A	III
03-Jun-2013	SL-526-SA7-SB-9.0-10.0	7079475	N	3546	8015M	III
03-Jun-2013	SL-526-SA7-SB-9.0-10.0	7079475	N	3546	8082A	III
03-Jun-2013	SL-526-SA7-SB-9.0-10.0	7079475	N	3546	8270D SIM	III
03-Jun-2013	SL-526-SA7-SB-9.0-10.0	7079475	N	5035A	8015M	III
03-Jun-2013	SL-526-SA7-SB-9.0-10.0	7079475	N	METHOD	1613B	III
03-Jun-2013	SL-526-SA7-SB-9.0-10.0	7079475	N	METHOD	7471B	III
03-Jun-2013	SL-525-SA7-SB-4.0-5.0	7079479	N	3050B	6010C	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2013	SL-525-SA7-SB-4.0-5.0	7079479	N	3050B	6020A	III
03-Jun-2013	SL-525-SA7-SB-4.0-5.0	7079479	N	3546	8015M	III
03-Jun-2013	SL-525-SA7-SB-4.0-5.0	7079479	N	3546	8082A	III
03-Jun-2013	SL-525-SA7-SB-4.0-5.0	7079479	N	3546	8270D SIM	III
03-Jun-2013	SL-525-SA7-SB-4.0-5.0	7079479	N	5035A	8015M	III
03-Jun-2013	SL-525-SA7-SB-4.0-5.0	7079479	N	METHOD	1613B	III
03-Jun-2013	SL-525-SA7-SB-4.0-5.0	7079479	N	METHOD	7471B	III
03-Jun-2013	SL-525-SA7-SB-9.5-10.5	7079480	N	3050B	6010C	III
03-Jun-2013	SL-525-SA7-SB-9.5-10.5	7079480	N	3050B	6020A	III
03-Jun-2013	SL-525-SA7-SB-9.5-10.5	7079480	N	3546	8015M	III
03-Jun-2013	SL-525-SA7-SB-9.5-10.5	7079480	N	3546	8082A	III
03-Jun-2013	SL-525-SA7-SB-9.5-10.5	7079480	N	3546	8270D SIM	III
03-Jun-2013	SL-525-SA7-SB-9.5-10.5	7079480	N	5035A	8015M	III
03-Jun-2013	SL-525-SA7-SB-9.5-10.5	7079480	N	METHOD	1613B	III
03-Jun-2013	SL-525-SA7-SB-9.5-10.5	7079480	N	METHOD	7471B	III
03-Jun-2013	EB1-060313	7079473	EB	3005A	6010C	III
03-Jun-2013	EB1-060313	7079473	EB	3510C	8015M	III
03-Jun-2013	EB1-060313	7079473	EB	3510C	8081B	III
03-Jun-2013	EB1-060313	7079473	EB	3510C	8082A	III
03-Jun-2013	EB1-060313	7079473	EB	3510C	8270D SIM	III
03-Jun-2013	EB1-060313	7079473	EB	5030B	8015M	III
03-Jun-2013	EB1-060313	7079473	EB	M3010A	6020A	III
03-Jun-2013	EB1-060313	7079473	EB	METHOD	1613B	III
03-Jun-2013	EB1-060313	7079473	EB	METHOD	7470A	III
03-Jun-2013	EB2-060313	7079474	EB	3005A	6010C	III
03-Jun-2013	EB2-060313	7079474	EB	3510C	8015M	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Jun-2013	EB2-060313	7079474	EB	3510C	8081B	III
03-Jun-2013	EB2-060313	7079474	EB	3510C	8082A	III
03-Jun-2013	EB2-060313	7079474	EB	3510C	8270D SIM	III
03-Jun-2013	EB2-060313	7079474	EB	5030B	8015M	III
03-Jun-2013	EB2-060313	7079474	EB	M3010A	6020A	III
03-Jun-2013	EB2-060313	7079474	EB	METHOD	1613B	III
03-Jun-2013	EB2-060313	7079474	EB	METHOD	7470A	III



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-525-SA7-SB-4.0-5.0

Collected: 6/3/2013 1:30:00 PM Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.736	J	0.506	MDL	4.05	PQL	mg/Kg	J	Z
BERYLLIUM	0.740	J	0.0678	MDL	1.01	PQL	mg/Kg	J	Z
BORON	6.22	J	0.840	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.381	J	0.0334	MDL	1.01	PQL	mg/Kg	J	Z
MOLYBDENUM	0.886	J	0.172	MDL	2.02	PQL	mg/Kg	U	B, F
POTASSIUM	1140		13.7	MDL	101	PQL	mg/Kg	J	Q
TIN	2.86	J	0.223	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	3.13	J	0.840	MDL	5.06	PQL	mg/Kg	J	Z

Sample ID: SL-525-SA7-SB-9.5-10.5

Collected: 6/3/2013 2:00:00 PM Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.721	J	0.504	MDL	4.03	PQL	mg/Kg	J	Z
BERYLLIUM	0.630	J	0.0675	MDL	1.01	PQL	mg/Kg	J	Z
BORON	6.43	J	0.837	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.349	J	0.0333	MDL	1.01	PQL	mg/Kg	J	Z
MOLYBDENUM	0.860	J	0.171	MDL	2.02	PQL	mg/Kg	U	B, F
POTASSIUM	1300		13.6	MDL	101	PQL	mg/Kg	J	Q
TIN	2.98	J	0.222	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	3.20	J	0.837	MDL	5.04	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-9.0-10.0

Collected: 6/3/2013 11:35:00 Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.959	J	0.531	MDL	4.25	PQL	mg/Kg	J	Z
BERYLLIUM	0.789	J	0.0712	MDL	1.06	PQL	mg/Kg	J	Z
BORON	7.42	J	0.882	MDL	10.6	PQL	mg/Kg	J	Z
CADMIUM	0.402	J	0.0351	MDL	1.06	PQL	mg/Kg	J	Z
MOLYBDENUM	1.15	J	0.181	MDL	2.12	PQL	mg/Kg	U	B, F
POTASSIUM	1330		14.3	MDL	106	PQL	mg/Kg	J	Q
TIN	2.95	J	0.234	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.93	J	0.882	MDL	5.31	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/26/2013 9:25:13 AM

ADR version 1.7.0.207

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# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-532-SA7-SB-3.0-4.0

Collected: 6/3/2013 10:00:00

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.822	J	0.521	MDL	4.17	PQL	mg/Kg	J	Z
BERYLLIUM	0.802	J	0.0699	MDL	1.04	PQL	mg/Kg	J	Z
BORON	7.47	J	0.865	MDL	10.4	PQL	mg/Kg	J	Z
CADMIUM	0.667	J	0.0344	MDL	1.04	PQL	mg/Kg	J	Z
MOLYBDENUM	0.514	J	0.177	MDL	2.09	PQL	mg/Kg	U	B, F
POTASSIUM	3310		14.1	MDL	104	PQL	mg/Kg	J	Q
TIN	3.48	J	0.229	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	3.05	J	0.865	MDL	5.21	PQL	mg/Kg	J	Z

Sample ID: SL-533-SA7-SB-2.5-3.5

Collected: 6/3/2013 9:10:00 AM

Analysis Type: REA/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.653	J	0.509	MDL	4.07	PQL	mg/Kg	J	Z
BERYLLIUM	0.543	J	0.0682	MDL	1.02	PQL	mg/Kg	J	Z
BORON	6.47	J	0.845	MDL	10.2	PQL	mg/Kg	J	Z
CADMIUM	0.485	J	0.0336	MDL	1.02	PQL	mg/Kg	J	Z
MOLYBDENUM	0.383	J	0.173	MDL	2.04	PQL	mg/Kg	U	B, F
POTASSIUM	2070		13.7	MDL	102	PQL	mg/Kg	J	Q
TIN	2.74	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.07	J	0.845	MDL	5.09	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A

Matrix: SO

Sample ID: SL-525-SA7-SB-4.0-5.0

Collected: 6/3/2013 1:30:00 PM

Analysis Type: REA2/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.176	J	0.0304	MDL	0.202	PQL	mg/Kg	J	Z

Sample ID: SL-525-SA7-SB-4.0-5.0

Collected: 6/3/2013 1:30:00 PM

Analysis Type: REA3/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.103	J	0.101	MDL	0.405	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: METALS

Method: 6020A

Matrix: SO

Sample ID: SL-525-SA7-SB-9.5-10.5

Collected: 6/3/2013 2:00:00 PM Analysis Type: REA2/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0319	J	0.0202	MDL	0.202	PQL	mg/Kg	J	Z
THALLIUM	0.185	J	0.0302	MDL	0.202	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-9.0-10.0

Collected: 6/3/2013 11:35:00 Analysis Type: REA2/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0362	J	0.0212	MDL	0.212	PQL	mg/Kg	J	Z
THALLIUM	0.176	J	0.0319	MDL	0.212	PQL	mg/Kg	J	Z

Sample ID: SL-526-SA7-SB-9.0-10.0

Collected: 6/3/2013 11:35:00 Analysis Type: REA3/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.106	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-532-SA7-SB-3.0-4.0

Collected: 6/3/2013 10:00:00 Analysis Type: REA3/TOT

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.104	MDL	0.417	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471B

Matrix: SO

Sample ID: SL-525-SA7-SB-4.0-5.0

Collected: 6/3/2013 1:30:00 PM Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0166	J	0.0102	MDL	0.0170	PQL	mg/Kg	J	Z

Sample ID: SL-525-SA7-SB-9.5-10.5

Collected: 6/3/2013 2:00:00 PM Analysis Type: RES/TOT

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0110	J	0.0101	MDL	0.0169	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: SVOA

Method: 1613B

Matrix: AQ

Sample ID: EB1-060313

Collected: 6/3/2013 3:00:00 PM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.318	JB	0.0961	MDL	10.2	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.285	JB	0.0394	MDL	10.2	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.192	JBQ	0.0467	MDL	10.2	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.262	JBQ	0.0620	MDL	10.2	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.112	JBQ	0.0984	MDL	10.2	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.119	JB	0.0615	MDL	10.2	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.142	JB	0.0980	MDL	10.2	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.205	JBQ	0.0596	MDL	10.2	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.160	JBQ	0.118	MDL	10.2	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.438	JB	0.0688	MDL	10.2	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.178	JB	0.0594	MDL	10.2	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.201	JBQ	0.0621	MDL	10.2	PQL	pg/L	U	B
2,3,7,8-TCDF	0.112	J	0.0880	MDL	2.04	PQL	pg/L	J	Z
OCDD	0.856	JBQ	0.0988	MDL	20.4	PQL	pg/L	U	B
OCDF	0.449	JBQ	0.124	MDL	20.4	PQL	pg/L	U	B

Sample ID: EB2-060313

Collected: 6/3/2013 3:30:00 PM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.372	JBQ	0.106	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.275	JBQ	0.0407	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.202	JB	0.0468	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.300	JBQ	0.0631	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.137	JB	0.0590	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.162	JBQ	0.105	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.129	JBQ	0.0607	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.405	JBQ	0.0693	MDL	10.1	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.195	JBQ	0.0585	MDL	10.1	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.250	JBQ	0.0669	MDL	10.1	PQL	pg/L	U	B
OCDD	0.871	JB	0.0919	MDL	20.2	PQL	pg/L	U	B
OCDF	0.688	JB	0.119	MDL	20.2	PQL	pg/L	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-525-SA7-SB-4.0-5.0

Collected: 6/3/2013 1:30:00 PM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.75	JB	0.0429	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.572	JB	0.0211	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0515	JBQ	0.0379	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0574	JQ	0.0297	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.0438	JB	0.0265	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.133	JBQ	0.0312	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.0492	JBQ	0.0244	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0915	JBQ	0.0296	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.0414	JB	0.0347	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,7,8-PCDF	0.747	JB	0.0244	MDL	5.11	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HxCDF	0.0827	JBQ	0.0273	MDL	5.11	PQL	ng/Kg	U	B
2,3,4,7,8-PCDF	0.0910	JBQ	0.0233	MDL	5.11	PQL	ng/Kg	U	B
OCDF	0.912	JB	0.0448	MDL	10.2	PQL	ng/Kg	J	Z

Sample ID: SL-525-SA7-SB-9.5-10.5

Collected: 6/3/2013 2:00:00 PM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.237	JB	0.0284	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0917	JBQ	0.0108	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0228	JBQ	0.0212	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.0282	JBQ	0.0123	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0414	JB	0.0251	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.0149	JB	0.0115	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,7,8-PCDF	0.0821	JBQ	0.0173	MDL	5.13	PQL	ng/Kg	U	B
2,3,4,7,8-PCDF	0.0190	JBQ	0.0178	MDL	5.13	PQL	ng/Kg	U	B
OCDD	2.30	JB	0.0343	MDL	10.3	PQL	ng/Kg	J	Z
OCDF	0.115	JB	0.0361	MDL	10.3	PQL	ng/Kg	U	B

Sample ID: SL-526-SA7-SB-9.0-10.0

Collected: 6/3/2013 11:35:00 Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.52	JB	0.0889	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.0935	JBQ	0.0143	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0301	JBQ	0.0222	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0742	JQ	0.0215	MDL	5.38	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-526-SA7-SB-9.0-10.0

Collected: 6/3/2013 11:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.117	JB	0.0201	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0844	JB	0.0235	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.114	JB	0.0189	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.0441	JBQ	0.0239	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0525	JBQ	0.0233	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.174	JB	0.0352	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.218	JBQ	0.0172	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0671	JB	0.0201	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.163	JBQ	0.0161	MDL	5.38	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0454	JQ	0.0255	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0708	JQ	0.0293	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	0.293	JBQ	0.0341	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: SL-532-SA7-SB-3.0-4.0

Collected: 6/3/2013 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	1.98	JB	0.0457	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.304	JB	0.0185	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0590	JBQ	0.0307	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0946	JQ	0.0340	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0819	JBQ	0.0226	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.139	JB	0.0375	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.101	JBQ	0.0211	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.119	JBQ	0.0398	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.167	JB	0.0449	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.181	JB	0.0208	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0621	JBQ	0.0214	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.208	JB	0.0203	MDL	5.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0439	JQ	0.0405	MDL	1.03	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0561	JQ	0.0465	MDL	1.03	PQL	ng/Kg	J	Z
OCDF	0.619	JB	0.0373	MDL	10.3	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-533-SA7-SB-2.5-3.5

Collected: 6/3/2013 9:10:00 AM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.256	JB	0.0332	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0702	JB	0.0126	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0505	JBQ	0.0212	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0529	J	0.0210	MDL	5.16	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	0.0593	JBQ	0.0224	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.0570	JBQ	0.0131	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0908	JBQ	0.0221	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.0271	JBQ	0.0162	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0985	JBQ	0.0341	MDL	5.16	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0979	JB	0.0165	MDL	5.16	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0598	JBQ	0.0140	MDL	5.16	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.101	JBQ	0.0158	MDL	5.16	PQL	ng/Kg	U	B
OCDD	1.40	JB	0.0313	MDL	10.3	PQL	ng/Kg	J	Z
OCDF	0.162	JB	0.0387	MDL	10.3	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M

Matrix: AQ

Sample ID: EB1-060313

Collected: 6/3/2013 3:00:00 PM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.098	U	0.049	MDL	0.098	PQL	mg/L	UJ	L

Sample ID: EB2-060313

Collected: 6/3/2013 3:30:00 PM Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.10	U	0.050	MDL	0.10	PQL	mg/L	UJ	L

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-525-SA7-SB-9.5-10.5

Collected: 6/3/2013 2:00:00 PM Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	5.8	J	4.1	MDL	10	PQL	mg/Kg	J	Z

Sample ID: SL-533-SA7-SB-2.5-3.5

Collected: 6/3/2013 9:10:00 AM Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	2.6	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z
EFH (C30-C40)	5.6	J	4.2	MDL	10	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** AQ

Sample ID: EB1-060313

Collected: 6/3/2013 3:00:00 PM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHOXYCHLOR	0.083	U	0.025	MDL	0.083	PQL	ug/L	UJ	E

Sample ID: EB2-060313

Collected: 6/3/2013 3:30:00 PM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHOXYCHLOR	0.082	U	0.025	MDL	0.082	PQL	ug/L	UJ	E

**Method Category:** SVOA

**Method:** 8082A

**Matrix:** SO

Sample ID: SL-525-SA7-SB-4.0-5.0

Collected: 6/3/2013 1:30:00 PM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	9.5	J	4.1	MDL	18	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: AQ

Sample ID: EB1-060313

Collected: 6/3/2013 3:00:00 PM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.16	J	0.053	MDL	1.1	PQL	ug/L	U	B
Diethylphthalate	0.11	J	0.053	MDL	1.1	PQL	ug/L	U	B
Di-n-butylphthalate	0.16	J	0.053	MDL	1.1	PQL	ug/L	U	B

Sample ID: EB2-060313

Collected: 6/3/2013 3:30:00 PM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.12	J	0.052	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.12	J	0.052	MDL	1.0	PQL	ug/L	U	B
Di-n-butylphthalate	0.12	J	0.052	MDL	1.0	PQL	ug/L	U	B

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-525-SA7-SB-4.0-5.0

Collected: 6/3/2013 1:30:00 PM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.43	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-525-SA7-SB-9.5-10.5

Collected: 6/3/2013 2:00:00 PM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.0	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-532-SA7-SB-3.0-4.0

Collected: 6/3/2013 10:00:00 Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.5	J	6.3	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	0.58	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.75	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-533-SA7-SB-2.5-3.5

Collected: 6/3/2013 9:10:00 AM Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

### Reason Code Legend

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

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH045



# Method Blank Outlier Report

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

<b>Method:</b> 1613B <b>Matrix:</b> AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1550B370622	6/7/2013 6:22:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD OCDD OCDF	0.337 pg/L 0.359 pg/L 0.195 pg/L 0.226 pg/L 0.339 pg/L 0.224 pg/L 0.205 pg/L 0.103 pg/L 0.297 pg/L 0.271 pg/L 0.516 pg/L 0.203 pg/L 0.268 pg/L 0.133 pg/L 0.859 pg/L 0.843 pg/L	EB1-060313 EB2-060313

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-060313(RES)	1,2,3,4,6,7,8-HPCDD	0.318 pg/L	0.318U pg/L
EB1-060313(RES)	1,2,3,4,6,7,8-HPCDF	0.285 pg/L	0.285U pg/L
EB1-060313(RES)	1,2,3,4,7,8,9-HPCDF	0.192 pg/L	0.192U pg/L
EB1-060313(RES)	1,2,3,4,7,8-HxCDF	0.262 pg/L	0.262U pg/L
EB1-060313(RES)	1,2,3,6,7,8-HxCDD	0.112 pg/L	0.112U pg/L
EB1-060313(RES)	1,2,3,6,7,8-HxCDF	0.119 pg/L	0.119U pg/L
EB1-060313(RES)	1,2,3,7,8,9-HxCDD	0.142 pg/L	0.142U pg/L
EB1-060313(RES)	1,2,3,7,8,9-HxCDF	0.205 pg/L	0.205U pg/L
EB1-060313(RES)	1,2,3,7,8-PECDD	0.160 pg/L	0.160U pg/L
EB1-060313(RES)	1,2,3,7,8-PECDF	0.438 pg/L	0.438U pg/L
EB1-060313(RES)	2,3,4,6,7,8-HxCDF	0.178 pg/L	0.178U pg/L
EB1-060313(RES)	2,3,4,7,8-PECDF	0.201 pg/L	0.201U pg/L
EB1-060313(RES)	OCDD	0.856 pg/L	0.856U pg/L
EB1-060313(RES)	OCDF	0.449 pg/L	0.449U pg/L
EB2-060313(RES)	1,2,3,4,6,7,8-HPCDD	0.372 pg/L	0.372U pg/L
EB2-060313(RES)	1,2,3,4,6,7,8-HPCDF	0.275 pg/L	0.275U pg/L
EB2-060313(RES)	1,2,3,4,7,8,9-HPCDF	0.202 pg/L	0.202U pg/L
EB2-060313(RES)	1,2,3,4,7,8-HxCDF	0.300 pg/L	0.300U pg/L
EB2-060313(RES)	1,2,3,6,7,8-HxCDF	0.137 pg/L	0.137U pg/L
EB2-060313(RES)	1,2,3,7,8,9-HxCDD	0.162 pg/L	0.162U pg/L
EB2-060313(RES)	1,2,3,7,8,9-HxCDF	0.129 pg/L	0.129U pg/L
EB2-060313(RES)	1,2,3,7,8-PECDF	0.405 pg/L	0.405U pg/L
EB2-060313(RES)	2,3,4,6,7,8-HxCDF	0.195 pg/L	0.195U pg/L
EB2-060313(RES)	2,3,4,7,8-PECDF	0.250 pg/L	0.250U pg/L
EB2-060313(RES)	OCDD	0.871 pg/L	0.871U pg/L
EB2-060313(RES)	OCDF	0.688 pg/L	0.688U pg/L

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1610B371903	6/11/2013 7:03:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.109 ng/Kg 0.0530 ng/Kg 0.0357 ng/Kg 0.0410 ng/Kg 0.0393 ng/Kg 0.0219 ng/Kg 0.0384 ng/Kg 0.0272 ng/Kg 0.0895 ng/Kg 0.0769 ng/Kg 0.0370 ng/Kg 0.0332 ng/Kg 0.225 ng/Kg 0.145 ng/Kg	SL-525-SA7-SB-4.0-5.0 SL-525-SA7-SB-9.5-10.5 SL-526-SA7-SB-9.0-10.0 SL-532-SA7-SB-3.0-4.0 SL-533-SA7-SB-2.5-3.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-525-SA7-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0515 ng/Kg	0.0515U ng/Kg
SL-525-SA7-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0438 ng/Kg	0.0438U ng/Kg
SL-525-SA7-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.133 ng/Kg	0.133U ng/Kg
SL-525-SA7-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0492 ng/Kg	0.0492U ng/Kg
SL-525-SA7-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0915 ng/Kg	0.0915U ng/Kg
SL-525-SA7-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0414 ng/Kg	0.0414U ng/Kg
SL-525-SA7-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0827 ng/Kg	0.0827U ng/Kg
SL-525-SA7-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0910 ng/Kg	0.0910U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	1,2,3,4,6,7,8-HPCDD	0.237 ng/Kg	0.237U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0917 ng/Kg	0.0917U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0228 ng/Kg	0.0228U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	1,2,3,4,7,8-HXCDF	0.0282 ng/Kg	0.0282U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	1,2,3,6,7,8-HXCDD	0.0414 ng/Kg	0.0414U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	1,2,3,6,7,8-HXCDF	0.0149 ng/Kg	0.0149U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	1,2,3,7,8-PECDF	0.0821 ng/Kg	0.0821U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	2,3,4,7,8-PECDF	0.0190 ng/Kg	0.0190U ng/Kg
SL-525-SA7-SB-9.5-10.5(RES)	OCDF	0.115 ng/Kg	0.115U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0935 ng/Kg	0.0935U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0301 ng/Kg	0.0301U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.117 ng/Kg	0.117U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0844 ng/Kg	0.0844U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0441 ng/Kg	0.0441U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.174 ng/Kg	0.174U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.218 ng/Kg	0.218U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0671 ng/Kg	0.0671U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.163 ng/Kg	0.163U ng/Kg
SL-526-SA7-SB-9.0-10.0(RES)	OCDF	0.293 ng/Kg	0.293U ng/Kg
SL-532-SA7-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0590 ng/Kg	0.0590U ng/Kg
SL-532-SA7-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0819 ng/Kg	0.0819U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/24/2013 7:52:01 AM

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
SL-532-SA7-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.139 ng/Kg	0.139U ng/Kg
SL-532-SA7-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.101 ng/Kg	0.101U ng/Kg
SL-532-SA7-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.119 ng/Kg	0.119U ng/Kg
SL-532-SA7-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.167 ng/Kg	0.167U ng/Kg
SL-532-SA7-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.181 ng/Kg	0.181U ng/Kg
SL-532-SA7-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0621 ng/Kg	0.0621U ng/Kg
SL-532-SA7-SB-3.0-4.0(RES)	OCDF	0.619 ng/Kg	0.619U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.256 ng/Kg	0.256U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0702 ng/Kg	0.0702U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0505 ng/Kg	0.0505U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0593 ng/Kg	0.0593U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0570 ng/Kg	0.0570U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0908 ng/Kg	0.0908U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0271 ng/Kg	0.0271U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.0985 ng/Kg	0.0985U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0979 ng/Kg	0.0979U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0598 ng/Kg	0.0598U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.101 ng/Kg	0.101U ng/Kg
SL-533-SA7-SB-2.5-3.5(RES)	OCDF	0.162 ng/Kg	0.162U ng/Kg

**Method:** 6010C  
**Matrix:** AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15635AB221848	6/6/2013 6:48:00 PM	ANTIMONY CALCIUM	0.0037 mg/L 0.0711 mg/L	EB1-060313 EB2-060313

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16037AB221648	6/11/2013 4:48:00 PM	CALCIUM PHOSPHORUS TIN	11.1 mg/Kg 1.14 mg/Kg 1.50 mg/Kg	SL-525-SA7-SB-4.0-5.0 SL-525-SA7-SB-9.5-10.5 SL-526-SA7-SB-9.0-10.0 SL-532-SA7-SB-3.0-4.0 SL-533-SA7-SB-2.5-3.5



## Method Blank Outlier Report

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

<b>Method:</b>	<b>6010C</b>
<b>Matrix:</b>	<b>SO</b>

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
SL-525-SA7-SB-4.0-5.0(REA/TOT)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-525-SA7-SB-9.5-10.5(REA/TOT)	TIN	2.98 mg/Kg	2.98U mg/Kg
SL-526-SA7-SB-9.0-10.0(REA/TOT)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-532-SA7-SB-3.0-4.0(REA/TOT)	TIN	3.48 mg/Kg	3.48U mg/Kg
SL-533-SA7-SB-2.5-3.5(REA/TOT)	TIN	2.74 mg/Kg	2.74U mg/Kg

<b>Method:</b>	<b>6020A</b>
<b>Matrix:</b>	<b>SO</b>

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16037AB221759A	6/11/2013 5:59:00 PM	STRONTIUM	0.0780 mg/Kg	SL-525-SA7-SB-4.0-5.0 SL-525-SA7-SB-9.5-10.5 SL-526-SA7-SB-9.0-10.0 SL-532-SA7-SB-3.0-4.0 SL-533-SA7-SB-2.5-3.5

<b>Method:</b>	<b>8270D SIM</b>
<b>Matrix:</b>	<b>AQ</b>

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWL15B261349	6/10/2013 1:49:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate	0.88 ug/L 0.092 ug/L 0.069 ug/L	EB1-060313 EB2-060313

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-060313(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.16 ug/L	1.1U ug/L
EB1-060313(RES)	Diethylphthalate	0.11 ug/L	1.1U ug/L
EB1-060313(RES)	Di-n-butylphthalate	0.16 ug/L	1.1U ug/L
EB2-060313(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.12 ug/L	1.0U ug/L
EB2-060313(RES)	Diethylphthalate	0.12 ug/L	1.0U ug/L
EB2-060313(RES)	Di-n-butylphthalate	0.12 ug/L	1.0U ug/L



# Field Blank Outlier Report

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PrepPH045

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 6010C

Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-525-SA7-SB-4.0-5.0 SL-525-SA7-SB-9.5-10.5 SL-526-SA7-SB-9.0-10.0 SL-532-SA7-SB-3.0-4.0 SL-533-SA7-SB-2.5-3.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-525-SA7-SB-4.0-5.0(REA/TOT)	MOLYBDENUM	0.886 mg/Kg	0.886U mg/Kg
SL-525-SA7-SB-9.5-10.5(REA/TOT)	MOLYBDENUM	0.860 mg/Kg	0.860U mg/Kg
SL-526-SA7-SB-9.0-10.0(REA/TOT)	MOLYBDENUM	1.15 mg/Kg	1.15U mg/Kg
SL-532-SA7-SB-3.0-4.0(REA/TOT)	MOLYBDENUM	0.514 mg/Kg	0.514U mg/Kg
SL-533-SA7-SB-2.5-3.5(REA/TOT)	MOLYBDENUM	0.383 mg/Kg	0.383U mg/Kg



# Surrogate Outlier Report

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PH045\_v1.

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 8082A

Matrix: SO

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
SL-526-SA7-SB-9.0 -10.0	DECACHLOROBIPHENYL	130	45-120	All Target Analytes	J (all detects)
SL-532-SA7-SB-3.0 -4.0	DECACHLOROBIPHENYL	122	45-120	All Target Analytes	J(all detects)



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PH045\_v1.

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method:** 8081B

**Matrix:** AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31570AY240053A (EB1-060313 EB2-060313)	METHOXYCHLOR	-	-	46.00-134.00	32 (30.00)	METHOXYCHLOR	J (all detects) UJ (all non-detects)

**Method:** 8015M

**Matrix:** AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31573AQ321756A P31573AY321817A (EB1-060313 EB2-060313)	EFH (C8-C11)	68	65	70.00-130.00	-	EFH (C8-C11)	J (all detects) UJ (all non-detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PH045\_v1.

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-060313	1,2,3,4,6,7,8-HPCDD	JB	0.318	10.2	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.285	10.2	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.192	10.2	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.262	10.2	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.112	10.2	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.119	10.2	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JB	0.142	10.2	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.205	10.2	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.160	10.2	PQL	pg/L	
	1,2,3,7,8-PECDF	JB	0.438	10.2	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.178	10.2	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.201	10.2	PQL	pg/L	
	2,3,7,8-TCDF	J	0.112	2.04	PQL	pg/L	
	OCDD	JBQ	0.856	20.4	PQL	pg/L	
	OCDF	JBQ	0.449	20.4	PQL	pg/L	
EB2-060313	1,2,3,4,6,7,8-HPCDD	JBQ	0.372	10.1	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.275	10.1	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.202	10.1	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.300	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.137	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.162	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.129	10.1	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.405	10.1	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.195	10.1	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.250	10.1	PQL	pg/L	
	OCDD	JB	0.871	20.2	PQL	pg/L	
	OCDF	JB	0.688	20.2	PQL	pg/L	

Method: 8270D SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-060313	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.16	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.11	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.16	1.1	PQL	ug/L	
EB2-060313	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.12	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.12	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.12	1.0	PQL	ug/L	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PH045\_v1.

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	1.75	5.11	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.572	5.11	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0515	5.11	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0574	5.11	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.0438	5.11	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.133	5.11	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.0492	5.11	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0915	5.11	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.0414	5.11	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.747	5.11	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0827	5.11	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0910	5.11	PQL	ng/Kg	
	OCDF	JB	0.912	10.2	PQL	ng/Kg	
SL-525-SA7-SB-9.5-10.5	1,2,3,4,6,7,8-HPCDD	JB	0.237	5.13	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0917	5.13	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0228	5.13	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0282	5.13	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.0414	5.13	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.0149	5.13	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0821	5.13	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0190	5.13	PQL	ng/Kg	
	OCDD	JB	2.30	10.3	PQL	ng/Kg	
	OCDF	JB	0.115	10.3	PQL	ng/Kg	
SL-526-SA7-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	1.52	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0935	5.38	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0301	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0742	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.117	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.0844	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.114	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0441	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0525	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.174	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.218	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0671	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.163	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0454	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0708	1.08	PQL	ng/Kg	
	OCDF	JBQ	0.293	10.8	PQL	ng/Kg	
SL-532-SA7-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	1.98	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.304	5.17	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0590	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0946	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0819	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.139	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.101	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.119	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.167	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.181	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0621	5.17	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.208	5.17	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0439	1.03	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0561	1.03	PQL	ng/Kg	
	OCDF	JB	0.619	10.3	PQL	ng/Kg	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PH045\_v1.

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-533-SA7-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.256	5.16	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0702	5.16	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0505	5.16	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0529	5.16	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.0593	5.16	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.0570	5.16	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0908	5.16	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0271	5.16	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0985	5.16	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0979	5.16	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0598	5.16	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.101	5.16	PQL	ng/Kg	
	OCDD	JB	1.40	10.3	PQL	ng/Kg	
	OCDF	JB	0.162	10.3	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-4.0-5.0	ANTIMONY	J	0.736	4.05	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.740	1.01	PQL	mg/Kg	
	BORON	J	6.22	10.1	PQL	mg/Kg	
	CADMIUM	J	0.381	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.886	2.02	PQL	mg/Kg	
	TIN	J	2.86	10.1	PQL	mg/Kg	
	Zirconium	J	3.13	5.06	PQL	mg/Kg	
SL-525-SA7-SB-9.5-10.5	ANTIMONY	J	0.721	4.03	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.630	1.01	PQL	mg/Kg	
	BORON	J	6.43	10.1	PQL	mg/Kg	
	CADMIUM	J	0.349	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.860	2.02	PQL	mg/Kg	
	TIN	J	2.98	10.1	PQL	mg/Kg	
	Zirconium	J	3.20	5.04	PQL	mg/Kg	
SL-526-SA7-SB-9.0-10.0	ANTIMONY	J	0.959	4.25	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.789	1.06	PQL	mg/Kg	
	BORON	J	7.42	10.6	PQL	mg/Kg	
	CADMIUM	J	0.402	1.06	PQL	mg/Kg	
	MOLYBDENUM	J	1.15	2.12	PQL	mg/Kg	
	TIN	J	2.95	10.6	PQL	mg/Kg	
	Zirconium	J	2.93	5.31	PQL	mg/Kg	
SL-532-SA7-SB-3.0-4.0	ANTIMONY	J	0.822	4.17	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.802	1.04	PQL	mg/Kg	
	BORON	J	7.47	10.4	PQL	mg/Kg	
	CADMIUM	J	0.667	1.04	PQL	mg/Kg	
	MOLYBDENUM	J	0.514	2.09	PQL	mg/Kg	
	TIN	J	3.48	10.4	PQL	mg/Kg	
	Zirconium	J	3.05	5.21	PQL	mg/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PH045\_v1.

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method:** 6010C

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-533-SA7-SB-2.5-3.5	ANTIMONY	J	0.653	4.07	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.543	1.02	PQL	mg/Kg	
	BORON	J	6.47	10.2	PQL	mg/Kg	
	CADMIUM	J	0.485	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.383	2.04	PQL	mg/Kg	
	TIN	J	2.74	10.2	PQL	mg/Kg	
	Zirconium	J	2.07	5.09	PQL	mg/Kg	

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-4.0-5.0	SELENIUM	J	0.103	0.405	PQL	mg/Kg	J (all detects)
	THALLIUM	J	0.176	0.202	PQL	mg/Kg	
SL-525-SA7-SB-9.5-10.5	SILVER	J	0.0319	0.202	PQL	mg/Kg	J (all detects)
	THALLIUM	J	0.185	0.202	PQL	mg/Kg	
SL-526-SA7-SB-9.0-10.0	SELENIUM	J	0.112	0.425	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0362	0.212	PQL	mg/Kg	
	THALLIUM	J	0.176	0.212	PQL	mg/Kg	
SL-532-SA7-SB-3.0-4.0	SELENIUM	J	0.151	0.417	PQL	mg/Kg	J (all detects)

**Method:** 7471B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-4.0-5.0	MERCURY	J	0.0166	0.0170	PQL	mg/Kg	J (all detects)
SL-525-SA7-SB-9.5-10.5	MERCURY	J	0.0110	0.0169	PQL	mg/Kg	J (all detects)

**Method:** 8015M

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-9.5-10.5	EFH (C30-C40)	J	5.8	10	PQL	mg/Kg	J (all detects)
SL-533-SA7-SB-2.5-3.5	EFH (C21-C30)	J	2.6	5.2	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	5.6	10	PQL	mg/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH045

Laboratory: LL

EDD Filename: PH045\_v1.

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method:** 8082A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-4.0-5.0	AROCLOR 1260	J	9.5	18	PQL	ug/Kg	J (all detects)

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-SA7-SB-4.0-5.0	CHRYSENE	J	0.43	1.7	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.3	1.7	PQL	ug/Kg	
SL-525-SA7-SB-9.5-10.5	NAPHTHALENE	J	1.0	1.7	PQL	ug/Kg	J (all detects)
SL-532-SA7-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.5	19	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.58	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.75	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.7	PQL	ug/Kg	
SL-533-SA7-SB-2.5-3.5	NAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)



LDC #: 30022A4

SDG #: PH045

Laboratory: Eurofins Lancaster Laboratories

## VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/27/13

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

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:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	SW	MS/D (soil from PH046)
VII.	Duplicate Sample Analysis	A	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	A	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV.	Field Blanks	SW	*EB=1,2 FB=FB-041113 (PH029)

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	EB1-060313	W	11		21		31	
2	EB2-060313	W	12		22		32	
3	SL-526-SA7-SB-9.0-10.0		13		23		33	
4	SL-532-SA7-SB-3.0-4.0		14		24		34	
5	SL-533-SA7-SB-2.5-3.5		15		25		35	
6	SL-525-SA7-SB-4.0-5.0		16		26		36	
7	SL-525-SA7-SB-9.5-10.5		17		27		37	
8			18		28		38	
9			19		29		39	
10			20		30		40	

Notes: \_\_\_\_\_



LDC #: 30025A4

**VALIDATION FINDINGS WORKSHEET**  
**PB/ICB/CCB QUALIFIED SAMPLES**

Page: 1 of 1  
 Reviewer: *[Signature]*  
 2nd Reviewer: *[Signature]*

**METHOD:** Trace metals (EPA SW 864 Method 6010B/6020/7000)

Soil preparation factor applied: 100x

Reason Code: B

Sample Concentration units, unless otherwise noted: ug/L

Associated Samples: All

Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/l )	Maximum ICB/CCB <sup>a</sup> (ug/l )	Action Level	3	4	5	6	7				
Mo			3.6	1.8	1.1	0.51	0.38	0.89	0.86				

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.



**VALIDATION FINDINGS WORKSHEET**  
**Field Blanks****METHOD:** Trace Metals (EPA SW846 6010B/7000)**Blank units:** mg/L **Associated sample units:** mg/Kg

Reason: F

**Sampling date:** 4/11/13 **Soil factor applied** 100x**Field blank type:** (circle one) Field Blank / Rinsate / Other:                      **Associated Samples:** All Soil

Analyte	Blank ID	Sample Identification										
	FB-041113 (SDG: PH029)	Action Limit	3	4	5	6	7					
Cu	0.0036	1.8										
Mo	0.0036	1.8	1.1	0.51	0.38	0.89	0.86					

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

Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".





Lancaster  
Laboratories

# QUALITY ASSURANCE SUMMARY

FORM 5A (MS/MSD)

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

SDG No.: PH046

Matrix: SOIL

Level

(low/med):

LOW

from PH046  
quality all soil samples; K: Jdet/A

Background Lab Sample ID: 7081058BKG Matrix Spike Lab Sample ID: 7081059MS Matrix Spike Duplicate Lab Sample ID: 7081060MSD  
Batch Id(s): P16037A, P16038B

Analyte	Mass	BKG Sample		MS Sample		MSD Sample		MS Spike Added	MSD Spike Added	Units	MS		MSD		RPD	Q	Control Limit		
		Result	C	Result	C	Result	C				%R	Q	%R	Q			%R	RPD	M
Aluminum		8891.2580		12135.0200		11977.2100		200.0000	200.0000	MG/KG	1622		1543		1				20P
Antimony		0.5630	B	41.0390		41.2710		50.0000	50.0000	MG/KG	81		81		1		75 - 125		20P
Arsenic		4.1040		20.0340		20.0180		15.0000	15.0000	MG/KG	106		106		0		75 - 125		20P
Barium		60.2450		265.8500		275.3810		200.0000	200.0000	MG/KG	103		108		4		75 - 125		20P
Beryllium		0.3970	B	5.4840		5.5600		5.0000	5.0000	MG/KG	102		103		1		75 - 125		20P
Boron		6.0500	B	198.1100		201.8330		200.0000	200.0000	MG/KG	96		98		2		75 - 125		20P
Cadmium		0.5040	B	5.4030		5.4390		5.0000	5.0000	MG/KG	98		99		1		75 - 125		20P
Calcium		2409.4590		2916.1790		2852.7140		400.0000	400.0000	MG/KG	127		111		2				20P
Chromium		11.3860		33.1480		32.2420		20.0000	20.0000	MG/KG	109		104		3		75 - 125		20P
Cobalt		3.7010		52.4120		52.6470		50.0000	50.0000	MG/KG	97		98		0		75 - 125		20P
Copper		5.2730		30.0230		31.2060		25.0000	25.0000	MG/KG	99		104		4		75 - 125		20P
Iron		16068.9670		17681.3510		17419.9070		100.0000	100.0000	MG/KG	1612		1351		1				20P
Lead		7.6700		22.8300		22.7040		15.0000	15.0000	MG/KG	101		100		1		75 - 125		20P
Lithium		21.8040		126.5500		127.2380		100.0000	100.0000	MG/KG	105		105		1		75 - 125		20P
Magnesium		3488.8380		4195.6450		4237.5910		200.0000	200.0000	MG/KG	353		374		1				20P
Manganese		239.0870		301.4110		303.3800		50.0000	50.0000	MG/KG	125		129		1				20P
Mercury		0.0148	B	0.1793		0.1743		0.1606	0.1603	MG/KG	102		100		3		65 - 135		20CV
Molybdenum		0.7590	B	196.3880		198.4310		200.0000	200.0000	MG/KG	98		99		1		75 - 125		20P
Nickel		6.6990		56.8560		56.3950		50.0000	50.0000	MG/KG	100		99		1		75 - 125		20P
Phosphorus		378.4570		481.2100		492.2680		100.0000	100.0000	MG/KG	103		114		2		75 - 125		20P
Potassium		2929.6960		4434.0770		4423.3090		1000.0000	1000.0000	MG/KG	150	N	149	N	0		75 - 125		20P
Selenium	78	0.1000	U	2.1300		2.1680		2.0000	2.0000	MG/KG	107		108		2		75 - 125		20MS
Silver	107	0.0317	B	9.7260		9.8560		10.0000	10.0000	MG/KG	97		98		1		75 - 125		20MS
Sodium		62.6850	B	1062.2240		1070.8190		1000.0000	1000.0000	MG/KG	100		101		1		75 - 125		20P
Strontium	88	8.5360		16.0780		16.0520		8.0000	8.0000	MG/KG	94		94		0		75 - 125		20MS
Thallium	203	0.1980	B	0.6462		0.6244		0.4000	0.4000	MG/KG	112		107		3		75 - 125		20MS
Tin		2.6620	B	373.2980		372.4550		400.0000	400.0000	MG/KG	93		92		0		75 - 125		20P
Titanium		928.0980		1368.6410		1333.8010		100.0000	100.0000	MG/KG	441		406		3				20P
Vanadium		24.5540		76.3400		76.8470		50.0000	50.0000	MG/KG	104		105		1		75 - 125		20P
Zinc		66.1420		120.9410		121.5600		50.0000	50.0000	MG/KG	110		111		1		75 - 125		20P
Zirconium		2.1780	B	102.4020		103.1070		100.0000	100.0000	MG/KG	100		101		1		75 - 125		20P

Note: Results shown are reported on an as-received basis.

## METHODS:

P = ICP Atomic Emission Spectrometer  
MS = ICP Mass Spectrometry

CV = Cold Vapor  
AF = Cold Vapor Atomic Fluorescence

## CONCENTRATION QUALIFIERS:

U= Below MDL, B= Below LOQ

## FLAGS:

N = Matrix Spike OOS, \* = Duplicate OOS



## **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-Jun-2013	SL-545A-SA7-SB-0.0-0.5	7081055	N	3546	8082A	III
03-Jun-2013	SL-545B-SA7-SB-0.0-0.5	7081056	N	3546	8082A	III
03-Jun-2013	SL-545C-SA7-SB-0.0-0.5	7081057	N	3546	8082A	III
04-Jun-2013	TB-060413	7081070	TB	5030B	8015M	IV
04-Jun-2013	SL-513-SA7-SB-0.0-0.5	7081058	N	3050B	6010C	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5	7081058	N	3050B	6020A	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5	7081058	N	3546	8015M	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5	7081058	N	3546	8081B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5	7081058	N	3546	8082A	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5	7081058	N	3546	8270D SIM	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5	7081058	N	METHOD	1613B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5	7081058	N	METHOD	7471B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MS	7081059	MS	3050B	6010C	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MS	7081059	MS	3050B	6020A	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MS	7081059	MS	3546	8015M	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MS	7081059	MS	3546	8081B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MS	7081059	MS	3546	8082A	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MS	7081059	MS	3546	8270D SIM	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MS	7081059	MS	METHOD	1613B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MS	7081059	MS	METHOD	7471B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MSD	7081060	MSD	3050B	6010C	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MSD	7081060	MSD	3050B	6020A	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MSD	7081060	MSD	3546	8015M	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MSD	7081060	MSD	3546	8081B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MSD	7081060	MSD	3546	8082A	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MSD	7081060	MSD	3546	8270D SIM	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MSD	7081060	MSD	METHOD	1613B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5MSD	7081060	MSD	METHOD	7471B	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5DUP	7081061	DUP	3050B	6010C	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5DUP	7081061	DUP	3050B	6020A	III
04-Jun-2013	SL-513-SA7-SB-0.0-0.5DUP	7081061	DUP	METHOD	7471B	III
04-Jun-2013	SL-913-SA7-SB-0.0-0.5	7081062	FD	3050B	6010C	III
04-Jun-2013	SL-913-SA7-SB-0.0-0.5	7081062	FD	3050B	6020A	III
04-Jun-2013	SL-913-SA7-SB-0.0-0.5	7081062	FD	3546	8015M	III
04-Jun-2013	SL-913-SA7-SB-0.0-0.5	7081062	FD	3546	8081B	III
04-Jun-2013	SL-913-SA7-SB-0.0-0.5	7081062	FD	3546	8082A	III
04-Jun-2013	SL-913-SA7-SB-0.0-0.5	7081062	FD	3546	8270D SIM	III
04-Jun-2013	SL-913-SA7-SB-0.0-0.5	7081062	FD	METHOD	1613B	III
04-Jun-2013	SL-913-SA7-SB-0.0-0.5	7081062	FD	METHOD	7471B	III
04-Jun-2013	SL-516-SA7-SB-0.0-0.5	7081063	N	3050B	6010C	III
04-Jun-2013	SL-516-SA7-SB-0.0-0.5	7081063	N	3050B	6020A	III
04-Jun-2013	SL-516-SA7-SB-0.0-0.5	7081063	N	3546	8015M	III
04-Jun-2013	SL-516-SA7-SB-0.0-0.5	7081063	N	3546	8082A	III
04-Jun-2013	SL-516-SA7-SB-0.0-0.5	7081063	N	3546	8270D SIM	III
04-Jun-2013	SL-516-SA7-SB-0.0-0.5	7081063	N	METHOD	1613B	III
04-Jun-2013	SL-516-SA7-SB-0.0-0.5	7081063	N	METHOD	7471B	III
04-Jun-2013	SL-524-SA7-SB-0.0-0.5	7081068	N	3050B	6010C	III
04-Jun-2013	SL-524-SA7-SB-0.0-0.5	7081068	N	3050B	6020A	III
04-Jun-2013	SL-524-SA7-SB-0.0-0.5	7081068	N	3546	8015M	III
04-Jun-2013	SL-524-SA7-SB-0.0-0.5	7081068	N	3546	8082A	III
04-Jun-2013	SL-524-SA7-SB-0.0-0.5	7081068	N	3546	8270D SIM	III
04-Jun-2013	SL-524-SA7-SB-0.0-0.5	7081068	N	METHOD	1613B	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Jun-2013	SL-524-SA7-SB-0.0-0.5	7081068	N	METHOD	7471B	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0	7081064	N	3050B	6010C	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0	7081064	N	3050B	6020A	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0	7081064	N	3546	8015M	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0	7081064	N	3546	8082A	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0	7081064	N	3546	8270D SIM	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0	7081064	N	5035A	8015M	IV
04-Jun-2013	SL-524-SA7-SB-1.0-2.0	7081064	N	METHOD	1613B	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0	7081064	N	METHOD	7471B	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MS	7081065	MS	3050B	6010C	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MS	7081065	MS	3050B	6020A	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MS	7081065	MS	3546	8015M	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MS	7081065	MS	3546	8082A	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MS	7081065	MS	3546	8270D SIM	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MS	7081065	MS	5035A	8015M	IV
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MS	7081065	MS	METHOD	1613B	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MS	7081065	MS	METHOD	7471B	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MSD	7081066	MSD	3050B	6010C	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MSD	7081066	MSD	3050B	6020A	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MSD	7081066	MSD	3546	8015M	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MSD	7081066	MSD	3546	8082A	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MSD	7081066	MSD	3546	8270D SIM	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MSD	7081066	MSD	5035A	8015M	IV
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MSD	7081066	MSD	METHOD	1613B	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0MSD	7081066	MSD	METHOD	7471B	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0DUP	7081067	DUP	3050B	6010C	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Jun-2013	SL-524-SA7-SB-1.0-2.0DUP	7081067	DUP	3050B	6020A	III
04-Jun-2013	SL-524-SA7-SB-1.0-2.0DUP	7081067	DUP	METHOD	7471B	III
04-Jun-2013	SL-924-SA7-SB-1.0-2.0	7081069	FD	3050B	6010C	III
04-Jun-2013	SL-924-SA7-SB-1.0-2.0	7081069	FD	3050B	6020A	III
04-Jun-2013	SL-924-SA7-SB-1.0-2.0	7081069	FD	3546	8015M	III
04-Jun-2013	SL-924-SA7-SB-1.0-2.0	7081069	FD	3546	8082A	III
04-Jun-2013	SL-924-SA7-SB-1.0-2.0	7081069	FD	3546	8270D SIM	III
04-Jun-2013	SL-924-SA7-SB-1.0-2.0	7081069	FD	5035A	8015M	IV
04-Jun-2013	SL-924-SA7-SB-1.0-2.0	7081069	FD	METHOD	1613B	III
04-Jun-2013	SL-924-SA7-SB-1.0-2.0	7081069	FD	METHOD	7471B	III



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-513-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:30:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.573	J	0.509	MDL	4.07	PQL	mg/Kg	J	Z
BERYLLIUM	0.404	J	0.0682	MDL	1.02	PQL	mg/Kg	J	Z
BORON	6.16	J	0.845	MDL	10.2	PQL	mg/Kg	J	Z
CADMIUM	0.513	J	0.0336	MDL	1.02	PQL	mg/Kg	J	Z
MOLYBDENUM	0.773	J	0.173	MDL	2.04	PQL	mg/Kg	UJ	FD, B, F
POTASSIUM	2980		13.7	MDL	102	PQL	mg/Kg	J	Q
SODIUM	63.8	J	17.0	MDL	102	PQL	mg/Kg	J	Z
TIN	2.71	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.22	J	0.845	MDL	5.09	PQL	mg/Kg	J	Z

Sample ID: SL-516-SA7-SB-0.0-0.5

Collected: 6/4/2013 9:55:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.538	J	0.0684	MDL	1.02	PQL	mg/Kg	J	Z
BORON	6.24	J	0.847	MDL	10.2	PQL	mg/Kg	J	Z
CADMIUM	0.518	J	0.0337	MDL	1.02	PQL	mg/Kg	J	Z
MOLYBDENUM	0.331	J	0.173	MDL	2.04	PQL	mg/Kg	U	B, F
POTASSIUM	2930		13.8	MDL	102	PQL	mg/Kg	J	Q
TIN	2.93	J	0.224	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.72	J	0.847	MDL	5.10	PQL	mg/Kg	J	Z

Sample ID: SL-524-SA7-SB-0.0-0.5

Collected: 6/4/2013 1:10:00 PM

Analysis Type: REA3

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.01	J	0.348	MDL	4.22	PQL	mg/Kg	J	Z
BERYLLIUM	0.490	J	0.0707	MDL	1.06	PQL	mg/Kg	J	Z
BORON	2.52	J	0.876	MDL	10.6	PQL	mg/Kg	J	Z
MOLYBDENUM	0.912	J	0.179	MDL	2.11	PQL	mg/Kg	U	F
TIN	2.76	J	0.232	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.19	J	0.876	MDL	5.28	PQL	mg/Kg	J	Z

Sample ID: SL-524-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:20:00 PM

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	3.93	J	0.343	MDL	4.16	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/26/2013 9:36:56 AM

ADR version 1.7.0.207

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-524-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:20:00 PM

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.480	J	0.0696	MDL	1.04	PQL	mg/Kg	J	Z
BORON	1.87	J	0.863	MDL	10.4	PQL	mg/Kg	J	Z
CADMIUM	0.370	J	0.0343	MDL	1.04	PQL	mg/Kg	J	Z
CALCIUM	5580		4.18	MDL	20.8	PQL	mg/Kg	J	E, FD
IRON	22000		3.95	MDL	41.6	PQL	mg/Kg	J	A
MOLYBDENUM	0.777	J	0.177	MDL	2.08	PQL	mg/Kg	UJ	FD, B, F
NICKEL	7.90		0.114	MDL	2.08	PQL	mg/Kg	J	E
PHOSPHORUS	401		0.530	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	3230		14.0	MDL	104	PQL	mg/Kg	J	Q
TIN	3.08	J	0.229	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	5.20	U	0.863	MDL	5.20	PQL	mg/Kg	UJ	FD

Sample ID: SL-524-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:20:00 PM

Analysis Type: REA2

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	10.3	J	0.936	MDL	10.4	PQL	mg/Kg	J	Z

Sample ID: SL-913-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:45:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.637	J	0.503	MDL	4.02	PQL	mg/Kg	J	Z
BERYLLIUM	0.453	J	0.0673	MDL	1.01	PQL	mg/Kg	J	Z
BORON	6.30	J	0.834	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.511	J	0.0332	MDL	1.01	PQL	mg/Kg	J	Z
MOLYBDENUM	0.282	J	0.171	MDL	2.01	PQL	mg/Kg	UJ	FD, B, F
POTASSIUM	3160		13.6	MDL	101	PQL	mg/Kg	J	Q
SODIUM	63.2	J	16.8	MDL	101	PQL	mg/Kg	J	Z
TIN	2.90	J	0.221	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.834	MDL	5.03	PQL	mg/Kg	J	Z

Sample ID: SL-924-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:30:00 PM

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	4.15	J	0.351	MDL	4.25	PQL	mg/Kg	J	Z
BERYLLIUM	0.518	J	0.0712	MDL	1.06	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-924-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:30:00 PM

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.31	J	0.882	MDL	10.6	PQL	mg/Kg	J	Z
CADMIUM	0.363	J	0.0351	MDL	1.06	PQL	mg/Kg	J	Z
CALCIUM	3310		4.27	MDL	21.2	PQL	mg/Kg	J	E, FD
IRON	21500		4.04	MDL	42.5	PQL	mg/Kg	J	A
MOLYBDENUM	0.422	J	0.181	MDL	2.12	PQL	mg/Kg	UJ	FD, B, F
NICKEL	8.12		0.117	MDL	2.12	PQL	mg/Kg	J	E
PHOSPHORUS	410		0.542	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2870		14.3	MDL	106	PQL	mg/Kg	J	Q
TIN	3.11	J	0.234	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.01	J	0.882	MDL	5.31	PQL	mg/Kg	J	Z, FD

Sample ID: SL-924-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:30:00 PM

Analysis Type: REA2

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	10.1	J	0.956	MDL	10.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020A

Matrix: SO

Sample ID: SL-513-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:30:00 AM

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0323	J	0.0204	MDL	0.204	PQL	mg/Kg	J	Z, FD
THALLIUM	0.202	J	0.0305	MDL	0.204	PQL	mg/Kg	J	Z

Sample ID: SL-516-SA7-SB-0.0-0.5

Collected: 6/4/2013 9:55:00 AM

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.102	MDL	0.408	PQL	mg/Kg	J	Z

Sample ID: SL-516-SA7-SB-0.0-0.5

Collected: 6/4/2013 9:55:00 AM

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0368	J	0.0204	MDL	0.204	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-524-SA7-SB-0.0-0.5

Collected: 6/4/2013 1:10:00 PM

Analysis Type: REA4

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0320	J	0.0211	MDL	0.211	PQL	mg/Kg	J	Z

Sample ID: SL-524-SA7-SB-0.0-0.5

Collected: 6/4/2013 1:10:00 PM

Analysis Type: REA5

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.137	J	0.106	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-524-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:20:00 PM

Analysis Type: REA2

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.208	U	0.0208	MDL	0.208	PQL	mg/Kg	UJ	FD
STRONTIUM	17.9		0.0353	MDL	0.416	PQL	mg/Kg	J	E

Sample ID: SL-913-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:45:00 AM

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.201	U	0.0201	MDL	0.201	PQL	mg/Kg	UJ	FD

Sample ID: SL-924-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:30:00 PM

Analysis Type: REA2

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0230	J	0.0212	MDL	0.212	PQL	mg/Kg	J	Z, FD
STRONTIUM	15.4		0.0361	MDL	0.425	PQL	mg/Kg	J	E

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

Sample ID: SL-513-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:30:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0151	J	0.0101	MDL	0.0168	PQL	mg/Kg	J	Z, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

<b>Method Category:</b>	<b>METALS</b>
<b>Method:</b>	<b>7471B</b>
<b>Matrix:</b>	<b>SO</b>

Sample ID: SL-516-SA7-SB-0.0-0.5

Collected: 6/4/2013 9:55:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0108	J	0.0102	MDL	0.0170	PQL	mg/Kg	J	Z

Sample ID: SL-913-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:45:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0267		0.0100	MDL	0.0167	PQL	mg/Kg	J	FD

<b>Method Category:</b>	<b>SVOA</b>
<b>Method:</b>	<b>1613B</b>
<b>Matrix:</b>	<b>SO</b>

Sample ID: SL-513-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:30:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	95.8	B	0.0514	MDL	5.09	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	19.2	B	0.0315	MDL	5.09	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	1.28	JB	0.0342	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.06	JBQ	0.0415	MDL	5.09	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDF	0.876	JB	0.0378	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	3.18	J	0.0445	MDL	5.09	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HxCDF	0.913	J	0.0376	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	1.87	JB	0.0401	MDL	5.09	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HxCDF	0.242	JB	0.0380	MDL	5.09	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.451	JB	0.0588	MDL	5.09	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.702	JB	0.0491	MDL	5.09	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HxCDF	0.894	JB	0.0375	MDL	5.09	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.839	JB	0.0439	MDL	5.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.110	J	0.0312	MDL	1.02	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.763	JB	0.0947	MDL	1.02	PQL	ng/Kg	J	Z, FD
OCDD	906	B	0.0441	MDL	10.2	PQL	ng/Kg	J	FD
OCDF	82.8	B	0.0356	MDL	10.2	PQL	ng/Kg	J	FD

Sample ID: SL-516-SA7-SB-0.0-0.5

Collected: 6/4/2013 9:55:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.123	JBQ	0.0238	MDL	4.96	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-516-SA7-SB-0.0-0.5

Collected: 6/4/2013 9:55:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.0727	JBQ	0.0469	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.165	JBQ	0.0779	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0727	JB	0.0238	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0778	JB	0.0136	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0848	J	0.0251	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0854	JQ	0.0126	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.0883	JBQ	0.0235	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.123	JBQ	0.0159	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.111	JB	0.0180	MDL	4.96	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0743	JB	0.0129	MDL	4.96	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.136	JB	0.0186	MDL	4.96	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0468	J	0.0310	MDL	0.993	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0260	JBQ	0.0223	MDL	0.993	PQL	ng/Kg	U	B
OCDD	0.498	JB	0.0281	MDL	9.93	PQL	ng/Kg	U	B
OCDF	0.210	JB	0.0387	MDL	9.93	PQL	ng/Kg	U	B

Sample ID: SL-524-SA7-SB-0.0-0.5

Collected: 6/4/2013 1:10:00 PM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.69	JB	0.0243	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.644	JB	0.0111	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0837	JB	0.0127	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0453	JB	0.0201	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0973	JBQ	0.0136	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.171	JB	0.0212	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.129	JBQ	0.0131	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.108	JB	0.0198	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.122	JB	0.0141	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0892	JB	0.0219	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.646	JB	0.0143	MDL	5.22	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.177	JB	0.0125	MDL	5.22	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.0763	JBQ	0.0129	MDL	5.22	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0213	JBQ	0.0173	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0282	J	0.0207	MDL	1.04	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

<b>Method Category:</b>	<b>SVOA</b>
<b>Method:</b>	<b>1613B</b>
<b>Matrix:</b>	<b>SO</b>

Sample ID: SL-524-SA7-SB-0.0-0.5

Collected: 6/4/2013 1:10:00 PM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	1.19	JB	0.0188	MDL	10.4	PQL	ng/Kg	J	Z

Sample ID: SL-524-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:20:00 PM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.859	JB	0.0175	MDL	5.34	PQL	ng/Kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.186	JB	0.0138	MDL	5.34	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0607	JB	0.0150	MDL	5.34	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0246	JBQ	0.0181	MDL	5.34	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDF	0.0474	JBQ	0.00876	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0966	JBQ	0.0191	MDL	5.34	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HxCDF	0.0572	JBQ	0.00854	MDL	5.34	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HxCDD	0.0998	JB	0.0186	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.0748	JBQ	0.00930	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0475	JBQ	0.0179	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.156	JB	0.00984	MDL	5.34	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HxCDF	0.0368	JB	0.00843	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0555	JBQ	0.00919	MDL	5.34	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0250	JBQ	0.0165	MDL	1.07	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0189	JQ	0.0139	MDL	1.07	PQL	ng/Kg	J	Z
OCDD	10.5	JB	0.0189	MDL	10.7	PQL	ng/Kg	J	Z, FD
OCDF	0.277	JBQ	0.0178	MDL	10.7	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-913-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:45:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	40.7	B	0.0470	MDL	4.96	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	8.72	B	0.0317	MDL	4.96	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	0.775	JB	0.0357	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.527	JB	0.0443	MDL	4.96	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDF	0.864	JB	0.0332	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	1.49	J	0.0483	MDL	4.96	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HxCDF	0.706	J	0.0330	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.998	JB	0.0434	MDL	4.96	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HxCDF	0.332	JB	0.0351	MDL	4.96	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

**Sample ID:** SL-913-SA7-SB-0.0-0.5

**Collected:** 6/4/2013 8:45:00 AM

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.315	JBQ	0.0482	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.646	JB	0.0435	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.624	JB	0.0318	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.691	JB	0.0384	MDL	4.96	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0389	J	0.0347	MDL	0.992	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.457	JB	0.0692	MDL	0.992	PQL	ng/Kg	J	Z, FD
OCDD	396	B	0.0392	MDL	9.92	PQL	ng/Kg	J	FD
OCDF	28.3	B	0.0302	MDL	9.92	PQL	ng/Kg	J	FD

**Sample ID:** SL-924-SA7-SB-1.0-2.0

**Collected:** 6/4/2013 1:30:00 PM

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.270	JB	0.0184	MDL	5.37	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.0678	JB	0.00813	MDL	5.37	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0329	JBQ	0.0105	MDL	5.37	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0417	JBQ	0.0166	MDL	5.37	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.0488	JBQ	0.00856	MDL	5.37	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0499	JB	0.0179	MDL	5.37	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.0296	JBQ	0.00823	MDL	5.37	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HxCDD	0.0755	JBQ	0.0163	MDL	5.37	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0603	JBQ	0.00888	MDL	5.37	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0567	JB	0.0207	MDL	5.37	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0904	JBQ	0.00986	MDL	5.37	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0408	JB	0.00791	MDL	5.37	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0338	JB	0.00910	MDL	5.37	PQL	ng/Kg	U	B
2,3,7,8-TCDD	1.07	U	0.0181	MDL	1.07	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.0139	J	0.0124	MDL	1.07	PQL	ng/Kg	J	Z
OCDD	2.71	JB	0.0223	MDL	10.7	PQL	ng/Kg	J	Z, FD
OCDF	0.135	JB	0.0215	MDL	10.7	PQL	ng/Kg	UJ	B, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-513-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:30:00 AM

Analysis Type: RES

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	160		20	MDL	51	PQL	mg/Kg	J	FD

Sample ID: SL-516-SA7-SB-0.0-0.5

Collected: 6/4/2013 9:55:00 AM

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	2.1	MDL	5.1	PQL	mg/Kg	J	Z
EFH (C30-C40)	4.8	J	4.1	MDL	10	PQL	mg/Kg	J	Z

Sample ID: SL-524-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:20:00 PM

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	12		2.2	MDL	5.4	PQL	mg/Kg	J	Q

Sample ID: SL-913-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:45:00 AM

Analysis Type: RES

Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	350		40	MDL	100	PQL	mg/Kg	J	FD

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-513-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:30:00 AM

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.53	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, FD
4,4'-DDT	7.0		0.36	MDL	1.7	PQL	ug/Kg	J	Q, Q
MIREX	0.63	J	0.36	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-913-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:45:00 AM

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.8	U	1.8	MDL	1.8	PQL	ug/Kg	UJ	FD
MIREX	0.89	J	0.36	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

<b>Method Category:</b>	SVOA		
<b>Method:</b>	8082A	<b>Matrix:</b>	SO

Sample ID: SL-513-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:30:00 AM

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	13	J	4.5	MDL	17	PQL	ug/Kg	J	Z
Aroclor 5460	33	U	10	MDL	33	PQL	ug/Kg	UJ	FD

Sample ID: SL-913-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:45:00 AM

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	13	J	4.5	MDL	17	PQL	ug/Kg	J	Z
Aroclor 5460	17	J	10	MDL	34	PQL	ug/Kg	J	Z, FD

<b>Method Category:</b>	SVOA		
<b>Method:</b>	8270D SIM	<b>Matrix:</b>	SO

Sample ID: SL-513-SA7-SB-0.0-0.5

Collected: 6/4/2013 8:30:00 AM

Analysis Type: RES-BASE/NEUTRAL

Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	7.0	J	6.8	MDL	17	PQL	ug/Kg	J	Z
PYRENE	7.5	J	6.8	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-524-SA7-SB-0.0-0.5

Collected: 6/4/2013 1:10:00 PM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.63	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(E)PYRENE	13	J	3.6	MDL	18	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.8	J	6.5	MDL	19	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-524-SA7-SB-1.0-2.0

Collected: 6/4/2013 1:20:00 PM

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z, Q
BENZO(A)PYRENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(E)PYRENE	6.5	J	3.6	MDL	18	PQL	ug/Kg	J	Z, Q
BENZO(G,H,I)PERYLENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

**Sample ID:** SL-524-SA7-SB-1.0-2.0

**Collected:** 6/4/2013 1:20:00 PM

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	1.8	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	FD
CHRYSENE	7.2		0.36	MDL	1.8	PQL	ug/Kg	J	Q, Q
DIBENZO(A,H)ANTHRACENE	0.75	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	0.96	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	4.1		0.72	MDL	1.8	PQL	ug/Kg	J	Q, Q
PYRENE	2.5		0.72	MDL	1.8	PQL	ug/Kg	J	Q, FD

**Sample ID:** SL-913-SA7-SB-0.0-0.5

**Collected:** 6/4/2013 8:45:00 AM

**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(B)FLUORANTHENE	13	J	6.8	MDL	17	PQL	ug/Kg	J	Z
FLUORANTHENE	8.3	J	6.8	MDL	17	PQL	ug/Kg	J	Z
PYRENE	8.4	J	6.8	MDL	17	PQL	ug/Kg	J	Z

**Sample ID:** SL-924-SA7-SB-1.0-2.0

**Collected:** 6/4/2013 1:30:00 PM

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(E)PYRENE	8.0	J	3.6	MDL	18	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.8	J	0.72	MDL	1.8	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	1.8	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	FD
FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	4.6		0.72	MDL	1.8	PQL	ug/Kg	J	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PrepPH046

eQAPP Name: CDM\_SSFL\_130705\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
<b>*#</b>	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Field Blank Contamination
FD	Field Duplicate Precision
Q	Laboratory Duplicate Precision
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: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH046



# Method Blank Outlier Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1630B371055	6/15/2013 10:55:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD OCDD OCDF	0.0612 ng/Kg 0.0525 ng/Kg 0.0372 ng/Kg 0.0141 ng/Kg 0.0365 ng/Kg 0.0191 ng/Kg 0.0232 ng/Kg 0.0376 ng/Kg 0.0595 ng/Kg 0.0468 ng/Kg 0.0591 ng/Kg 0.0280 ng/Kg 0.0223 ng/Kg 0.0555 ng/Kg 0.295 ng/Kg 0.0998 ng/Kg	SL-524-SA7-SB-0.0-0.5 SL-524-SA7-SB-1.0-2.0 SL-924-SA7-SB-1.0-2.0
BLK1680B371423	6/19/2013 2:23:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDF OCDD OCDF	0.100 ng/Kg 0.0263 ng/Kg 0.0600 ng/Kg 0.0408 ng/Kg 0.0548 ng/Kg 0.0618 ng/Kg 0.0712 ng/Kg 0.0664 ng/Kg 0.0798 ng/Kg 0.0700 ng/Kg 0.0765 ng/Kg 0.0365 ng/Kg 0.342 ng/Kg 0.155 ng/Kg	SL-513-SA7-SB-0.0-0.5 SL-516-SA7-SB-0.0-0.5 SL-913-SA7-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-513-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.242 ng/Kg	0.242U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	0.123 ng/Kg	0.123U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0727 ng/Kg	0.0727U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.165 ng/Kg	0.165U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0727 ng/Kg	0.0727U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.0778 ng/Kg	0.0778U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.0883 ng/Kg	0.0883U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.123 ng/Kg	0.123U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.111 ng/Kg	0.111U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.0743 ng/Kg	0.0743U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.136 ng/Kg	0.136U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.0260 ng/Kg	0.0260U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	OCDD	0.498 ng/Kg	0.498U ng/Kg
SL-516-SA7-SB-0.0-0.5(RES)	OCDF	0.210 ng/Kg	0.210U ng/Kg
SL-524-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0837 ng/Kg	0.0837U ng/Kg
SL-524-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0453 ng/Kg	0.0453U ng/Kg
SL-524-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.0973 ng/Kg	0.0973U ng/Kg
SL-524-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.108 ng/Kg	0.108U ng/Kg
SL-524-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.122 ng/Kg	0.122U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

7/24/2013 7:01:12 AM

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

<b>Method:</b>	1613B
<b>Matrix:</b>	SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
SL-524-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0892 ng/Kg	0.0892U ng/Kg
SL-524-SA7-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0763 ng/Kg	0.0763U ng/Kg
SL-524-SA7-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0213 ng/Kg	0.0213U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,4,6,7,8-HPCDF	0.186 ng/Kg	0.186U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0607 ng/Kg	0.0607U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,4,7,8-HxCDD	0.0246 ng/Kg	0.0246U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,4,7,8-HXCDF	0.0474 ng/Kg	0.0474U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,6,7,8-HXCDF	0.0572 ng/Kg	0.0572U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,7,8,9-HXCDD	0.0998 ng/Kg	0.0998U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,7,8,9-HXCDF	0.0748 ng/Kg	0.0748U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,7,8-PECDD	0.0475 ng/Kg	0.0475U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	1,2,3,7,8-PECDF	0.156 ng/Kg	0.156U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	2,3,4,6,7,8-HXCDF	0.0368 ng/Kg	0.0368U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	2,3,4,7,8-PECDF	0.0555 ng/Kg	0.0555U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	2,3,7,8-TCDD	0.0250 ng/Kg	0.0250U ng/Kg
SL-524-SA7-SB-1.0-2.0(RES)	OCDF	0.277 ng/Kg	0.277U ng/Kg
SL-913-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.332 ng/Kg	0.332U ng/Kg
SL-913-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.315 ng/Kg	0.315U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,4,6,7,8-HPCDD	0.270 ng/Kg	0.270U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0678 ng/Kg	0.0678U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0329 ng/Kg	0.0329U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,4,7,8-HxCDD	0.0417 ng/Kg	0.0417U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,4,7,8-HXCDF	0.0488 ng/Kg	0.0488U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,6,7,8-HXCDD	0.0499 ng/Kg	0.0499U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,6,7,8-HXCDF	0.0296 ng/Kg	0.0296U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,7,8,9-HXCDD	0.0755 ng/Kg	0.0755U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,7,8,9-HXCDF	0.0603 ng/Kg	0.0603U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,7,8-PECDD	0.0567 ng/Kg	0.0567U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	1,2,3,7,8-PECDF	0.0904 ng/Kg	0.0904U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	2,3,4,6,7,8-HXCDF	0.0408 ng/Kg	0.0408U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	2,3,4,7,8-PECDF	0.0338 ng/Kg	0.0338U ng/Kg
SL-924-SA7-SB-1.0-2.0(RES)	OCDF	0.135 ng/Kg	0.135U ng/Kg

<b>Method:</b>	6010C
<b>Matrix:</b>	SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16037AB221648	6/11/2013 4:48:00 PM	CALCIUM PHOSPHORUS TIN	11.1 mg/Kg 1.14 mg/Kg 1.50 mg/Kg	SL-513-SA7-SB-0.0-0.5 SL-516-SA7-SB-0.0-0.5 SL-913-SA7-SB-0.0-0.5

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16037CB220935	6/13/2013 9:35:00 AM	CALCIUM	6.15 mg/Kg	SL-524-SA7-SB-1.0-2.0 SL-924-SA7-SB-1.0-2.0
P16037CB222021	6/12/2013 8:21:00 PM	IRON PHOSPHORUS TIN	4.39 mg/Kg 1.17 mg/Kg 1.43 mg/Kg	SL-524-SA7-SB-1.0-2.0 SL-924-SA7-SB-1.0-2.0
P16437AB220226	6/17/2013 2:26:00 AM	ALUMINUM CALCIUM PHOSPHORUS TIN ZINC	8.46 mg/Kg 9.77 mg/Kg 1.17 mg/Kg 1.48 mg/Kg 1.92 mg/Kg	SL-524-SA7-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-513-SA7-SB-0.0-0.5(RES)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-516-SA7-SB-0.0-0.5(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-524-SA7-SB-0.0-0.5(REA3)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-524-SA7-SB-1.0-2.0(REA)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-913-SA7-SB-0.0-0.5(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-924-SA7-SB-1.0-2.0(REA)	TIN	3.11 mg/Kg	3.11U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16037AB221759A	6/11/2013 5:59:00 PM	STRONTIUM	0.0780 mg/Kg	SL-513-SA7-SB-0.0-0.5 SL-516-SA7-SB-0.0-0.5 SL-913-SA7-SB-0.0-0.5
P16437AB221115A	6/17/2013 11:15:00 AM	STRONTIUM	0.0566 mg/Kg	SL-524-SA7-SB-0.0-0.5



# Field Blank Outlier Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

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

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041113(REA2)	4/11/2013 3:00:00 PM	COPPER MOLYBDENUM	0.0036 mg/L 0.0036 mg/L	SL-513-SA7-SB-0.0-0.5 SL-516-SA7-SB-0.0-0.5 SL-524-SA7-SB-0.0-0.5 SL-524-SA7-SB-1.0-2.0 SL-545A-SA7-SB-0.0-0.5 SL-545B-SA7-SB-0.0-0.5 SL-545C-SA7-SB-0.0-0.5 SL-913-SA7-SB-0.0-0.5 SL-924-SA7-SB-1.0-2.0

*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-SA7-SB-0.0-0.5(RES)	MOLYBDENUM	0.773 mg/Kg	0.773U mg/Kg
SL-516-SA7-SB-0.0-0.5(RES)	MOLYBDENUM	0.331 mg/Kg	0.331U mg/Kg
SL-524-SA7-SB-0.0-0.5(REA3)	MOLYBDENUM	0.912 mg/Kg	0.912U mg/Kg
SL-524-SA7-SB-1.0-2.0(REA)	MOLYBDENUM	0.777 mg/Kg	0.777U mg/Kg
SL-913-SA7-SB-0.0-0.5(RES)	MOLYBDENUM	0.282 mg/Kg	0.282U mg/Kg
SL-924-SA7-SB-1.0-2.0(REA)	MOLYBDENUM	0.422 mg/Kg	0.422U mg/Kg



# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-513-SA7-SB-0.0-0.5MS SL-513-SA7-SB-0.0-0.5MSD (SL-513-SA7-SB-0.0-0.5)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	394 1639 2997	444 2238 5212	49.00-123.00 49.00-123.00 49.00-123.00	- - 31 (20.00)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	No Qual, Diluted Out
SL-524-SA7-SB-1.0-2.0MS SL-524-SA7-SB-1.0-2.0MSD (SL-524-SA7-SB-1.0-2.0)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	293 1322 2447	270 1646 2930	49.00-123.00 49.00-123.00 49.00-123.00	- - -	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J(all detects) EFH (C30-C40), 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-513-SA7-SB-0.0-0.5MS SL-513-SA7-SB-0.0-0.5MSD (SL-513-SA7-SB-0.0-0.5)	4,4'-DDT	449	-	10.00-176.00	111 (50.00)	4,4'-DDT	J(all detects)

Method: 1613B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-513-SA7-SB-0.0-0.5MS SL-513-SA7-SB-0.0-0.5MSD (SL-513-SA7-SB-0.0-0.5)	OCDD	-124	-129	40.00-135.00	-	OCDD	No Qual, >4x

Method: 8270D SIM

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-513-SA7-SB-0.0-0.5MS SL-513-SA7-SB-0.0-0.5MSD (SL-513-SA7-SB-0.0-0.5)	BENZO(B)FLUORANTHENE BENZO(E)PYRENE BENZO(K)FLUORANTHENE Di-n-octylphthalate N-NITROSODIMETHYLAMINE	143 161 136 192 163	- 175 133 181 136	26.00-142.00 70.00-130.00 47.00-129.00 52.00-162.00 48.00-113.00	- - - - -	BENZO(B)FLUORANTHENE BENZO(E)PYRENE BENZO(K)FLUORANTHENE Di-n-octylphthalate N-NITROSODIMETHYLAMINE	No Qual, Diluted Out
SL-513-SA7-SB-0.0-0.5MS SL-513-SA7-SB-0.0-0.5MSD (SL-513-SA7-SB-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT Butylbenzylphthalate Diethylphthalate Dimethylphthalate Di-n-butylphthalate	0 0 0 0 0	0 0 0 0 0	39.00-167.00 59.00-153.00 76.00-127.00 62.00-136.00 62.00-154.00	- - - - -	BIS(2-ETHYLHEXYL)PHTHALA Butylbenzylphthalate Diethylphthalate Dimethylphthalate Di-n-butylphthalate	No Qual, Diluted Out
SL-524-SA7-SB-1.0-2.0MS SL-524-SA7-SB-1.0-2.0MSD (SL-524-SA7-SB-1.0-2.0)	BENZO(A)ANTHRACENE BENZO(E)PYRENE Butylbenzylphthalate CHRYSENE Di-n-octylphthalate PHENANTHRENE PYRENE	148 134 165 183 197 156 149	- - - - - - -	32.00-135.00 70.00-130.00 59.00-153.00 29.00-148.00 52.00-162.00 29.00-142.00 26.00-143.00	- - 37 (30.00) 40 (30.00) - 35 (30.00) -	BENZO(A)ANTHRACENE BENZO(E)PYRENE Butylbenzylphthalate CHRYSENE Di-n-octylphthalate PHENANTHRENE PYRENE	J(all detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 6010C

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-513-SA7-SB-0.0-0.5MS (TOT)	ALUMINUM	1622	1543	75.00-125.00	-	ALUMINUM	J(all detects)
SL-513-SA7-SB-0.0-0.5MSD (TOT)	CALCIUM	127	-	75.00-125.00	-	CALCIUM	
(SL-513-SA7-SB-0.0-0.5)	IRON	1612	1351	75.00-125.00	-	IRON	
SL-516-SA7-SB-0.0-0.5	MAGNESIUM	353	374	75.00-125.00	-	MAGNESIUM	
SL-913-SA7-SB-0.0-0.5)	MANGANESE	-	129	75.00-125.00	-	MANGANESE	
	POTASSIUM	150	149	75.00-125.00	-	POTASSIUM	Al, Ca, Fe, Mg, Mn, Ti, No Qual, >4x
	TITANIUM	441	406	75.00-125.00	-	TITANIUM	
SL-524-SA7-SB-1.0-2.0MS (TOT)	ALUMINUM	1690	1435	75.00-125.00	-	ALUMINUM	J(all detects)
SL-524-SA7-SB-1.0-2.0MSD (TOT)	CALCIUM	385	235	75.00-125.00	-	CALCIUM	
(SL-524-SA7-SB-1.0-2.0)	IRON	2592	918	75.00-125.00	-	IRON	
SL-924-SA7-SB-1.0-2.0)	MAGNESIUM	435	294	75.00-125.00	-	MAGNESIUM	
	MANGANESE	164	142	75.00-125.00	-	MANGANESE	
	PHOSPHORUS	156	-	75.00-125.00	-	PHOSPHORUS	Al, Ca, Fe, Mg, Mn, Ti, No Qual, >4x
	POTASSIUM	138	-	75.00-125.00	-	POTASSIUM	
	TITANIUM	368	282	75.00-125.00	-	TITANIUM	



# Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method:** 160.3M  
**Matrix:** SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-513-SA7-SB-0.0-0.5DUP (SL-516-SA7-SB-0.0-0.5 SL-545A-SA7-SB-0.0-0.5 SL-545B-SA7-SB-0.0-0.5 SL-545C-SA7-SB-0.0-0.5 SL-913-SA7-SB-0.0-0.5)	MOISTURE	40	20.00	No Qual

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

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-513-SA7-SB-0.0-0.5DUP (TOT) (SL-513-SA7-SB-0.0-0.5 SL-516-SA7-SB-0.0-0.5 SL-913-SA7-SB-0.0-0.5)	ANTIMONY MOLYBDENUM NICKEL Zirconium	200 65 21 31	20.00 20.00 20.00 20.00	No Qual, OK By Difference

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

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-513-SA7-SB-0.0-0.5DUP (TOT) (SL-513-SA7-SB-0.0-0.5 SL-516-SA7-SB-0.0-0.5 SL-913-SA7-SB-0.0-0.5)	SILVER	200	20.00	No Qual, OK By Difference

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

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-524-SA7-SB-1.0-2.0DUP (TOT) (SL-524-SA7-SB-1.0-2.0 SL-924-SA7-SB-1.0-2.0)	BORON CALCIUM MOLYBDENUM NICKEL Zirconium	27 42 66 27 200	20.00 20.00 20.00 20.00 20.00	J(all detects) UJ(all non-detects)  B, Mo, Zr, No Qual, OK by Difference

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

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-524-SA7-SB-1.0-2.0DUP (TOT) (SL-524-SA7-SB-1.0-2.0 SL-924-SA7-SB-1.0-2.0)	SILVER STRONTIUM	200 31	20.00 20.00	J(all detects) UJ(all non-detects)  Ag, No Qual, OK by Difference

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Field Duplicate RPD Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 160.3M

Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5	SL-913-SA7-SB-0.0-0.5			
MOISTURE	1.8	1.5	18		No Qualifiers Applied

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-524-SA7-SB-1.0-2.0	SL-924-SA7-SB-1.0-2.0			
MOISTURE	7.5	7.7	3		No Qualifiers Applied

Method: 1613B

Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5	SL-913-SA7-SB-0.0-0.5			
1,2,3,4,7,8,9-HPCDF	1.28	0.775	49	50.00	No Qualifiers Applied
1,2,3,4,7,8-HXCDF	0.876	0.864	1	50.00	
1,2,3,6,7,8-HXCDF	0.913	0.706	26	50.00	
1,2,3,7,8,9-HXCDF	0.242	0.332	31	50.00	
1,2,3,7,8-PECDD	0.451	0.315	36	50.00	
1,2,3,7,8-PECDF	0.702	0.646	8	50.00	
2,3,4,6,7,8-HXCDF	0.894	0.624	36	50.00	
2,3,4,7,8-PECDF	0.839	0.691	19	50.00	
1,2,3,4,6,7,8-HPCDD	95.8	40.7	81	50.00	J(all detects)
1,2,3,4,6,7,8-HPCDF	19.2	8.72	75	50.00	
1,2,3,4,7,8-HxCDD	1.06	0.527	67	50.00	
1,2,3,6,7,8-HXCDD	3.18	1.49	72	50.00	
1,2,3,7,8,9-HXCDD	1.87	0.998	61	50.00	
2,3,7,8-TCDD	0.110	0.0389	96	50.00	
2,3,7,8-TCDF	0.763	0.457	50	50.00	
OCDD	906	396	78	50.00	
OCDF	82.8	28.3	98	50.00	

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-524-SA7-SB-1.0-2.0	SL-924-SA7-SB-1.0-2.0			
1,2,3,4,7,8-HXCDF	0.0474	0.0488	3	50.00	No Qualifiers Applied
1,2,3,7,8,9-HXCDD	0.0998	0.0755	28	50.00	
1,2,3,7,8,9-HXCDF	0.0748	0.0603	21	50.00	
1,2,3,7,8-PECDD	0.0475	0.0567	18	50.00	
2,3,4,6,7,8-HXCDF	0.0368	0.0408	10	50.00	
2,3,4,7,8-PECDF	0.0555	0.0338	49	50.00	
2,3,7,8-TCDF	0.0189	0.0139	30	50.00	
1,2,3,4,6,7,8-HPCDD	0.859	0.270	104	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,6,7,8-HPCDF	0.186	0.0678	93	50.00	
1,2,3,4,7,8,9-HPCDF	0.0607	0.0329	59	50.00	
1,2,3,4,7,8-HxCDD	0.0246	0.0417	52	50.00	
1,2,3,6,7,8-HXCDD	0.0966	0.0499	64	50.00	
1,2,3,6,7,8-HXCDF	0.0572	0.0296	64	50.00	
1,2,3,7,8-PECDF	0.156	0.0904	53	50.00	
2,3,7,8-TCDD	0.0250	1.07 U	200	50.00	
OCDD	10.5	2.71	118	50.00	
OCDF	0.277	0.135	69	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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# Field Duplicate RPD Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 6010C

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5 (TOT)	SL-913-SA7-SB-0.0-0.5 (TOT)			
ALUMINUM	9050	9640	6	50.00	No Qualifiers Applied
ANTIMONY	0.573	0.637	11	50.00	
ARSENIC	4.18	4.31	3	50.00	
BARIUM	61.3	65.4	6	50.00	
BERYLLIUM	0.404	0.453	11	50.00	
BORON	6.16	6.30	2	50.00	
CADMIUM	0.513	0.511	0	50.00	
CALCIUM	2450	2620	7	50.00	
CHROMIUM	11.6	12.4	7	50.00	
COBALT	3.77	4.18	10	50.00	
COPPER	5.37	5.92	10	50.00	
IRON	16400	16700	2	50.00	
LEAD	7.81	9.75	22	50.00	
LITHIUM	22.2	22.4	1	50.00	
MAGNESIUM	3550	3720	5	50.00	
MANGANESE	243	255	5	50.00	
NICKEL	6.82	7.63	11	50.00	
PHOSPHORUS	385	389	1	50.00	
POTASSIUM	2980	3160	6	50.00	
SODIUM	63.8	63.2	1	50.00	
TIN	2.71	2.90	7	50.00	
TITANIUM	945	1030	9	50.00	
VANADIUM	25.0	26.7	7	50.00	
ZINC	67.4	76.4	13	50.00	
Zirconium	2.22	2.48	11	50.00	
MOLYBDENUM	0.773	0.282	93	50.00	J(all detects)

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-524-SA7-SB-1.0-2.0 (TOT)	SL-924-SA7-SB-1.0-2.0 (TOT)			
ALUMINUM	12300	13300	8	50.00	No Qualifiers Applied
ARSENIC	3.93	4.15	5	50.00	
BARIUM	88.1	78.6	11	50.00	
BERYLLIUM	0.480	0.518	8	50.00	
BORON	1.87	2.31	21	50.00	
CADMIUM	0.370	0.363	2	50.00	
CHROMIUM	18.5	17.8	4	50.00	
COBALT	4.59	4.93	7	50.00	
COPPER	10.3	10.1	2	50.00	
IRON	22000	21500	2	50.00	
LEAD	5.69	5.95	4	50.00	
LITHIUM	27.4	27.0	1	50.00	
MAGNESIUM	4840	4600	5	50.00	
MANGANESE	280	269	4	50.00	
NICKEL	7.90	8.12	3	50.00	
PHOSPHORUS	401	410	2	50.00	
POTASSIUM	3230	2870	12	50.00	
SODIUM	123	132	7	50.00	
TIN	3.08	3.11	1	50.00	
TITANIUM	1280	1250	2	50.00	
VANADIUM	32.9	34.2	4	50.00	
ZINC	59.2	54.3	9	50.00	
CALCIUM	5580	3310	51	50.00	J(all detects) UJ(all non-detects)
MOLYBDENUM	0.777	0.422	59	50.00	
Zirconium	5.20 U	1.01	200	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Field Duplicate RPD Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 6020A

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5 (TOT)	SL-913-SA7-SB-0.0-0.5 (TOT)			
STRONTIUM	8.69	9.91	13	50.00	No Qualifiers Applied
THALLIUM	0.202	0.209	3	50.00	
SILVER	0.0323	0.201 U	200	50.00	J(all detects) UJ(all non-detects)

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-524-SA7-SB-1.0-2.0 (TOT)	SL-924-SA7-SB-1.0-2.0 (TOT)			
STRONTIUM	17.9	15.4	15	50.00	No Qualifiers Applied
THALLIUM	0.285	0.228	22	50.00	
SILVER	0.208 U	0.0230	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471B

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5 (TOT)	SL-913-SA7-SB-0.0-0.5 (TOT)			
MERCURY	0.0151	0.0267	56	50.00	J(all detects)

Method: 8015M

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5	SL-913-SA7-SB-0.0-0.5			
EFH (C21-C30)	100	160	46	50.00	No Qualifiers Applied
EFH (C30-C40)	160	350	75	50.00	J(all detects)

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-524-SA7-SB-1.0-2.0	SL-924-SA7-SB-1.0-2.0			
EFH (C21-C30)	12	14	15	50.00	No Qualifiers Applied
EFH (C30-C40)	23	36	44	50.00	

Method: 8081B

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5	SL-913-SA7-SB-0.0-0.5			
4,4'-DDT	7.0	6.3	11	50.00	No Qualifiers Applied
MIREX	0.63	0.89	34	50.00	
4,4'-DDE	0.53	1.8 U	200	50.00	J(all detects) UJ(all non-detects)



## Field Duplicate RPD Report

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 8082A

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5	SL-913-SA7-SB-0.0-0.5			
AROCLOR 1254	13	13	0	50.00	No Qualifiers Applied
Aroclor 5460	33 U	17	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270D SIM

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5	SL-913-SA7-SB-0.0-0.5			
BENZO(B)FLUORANTHENE	18	13	32	50.00	No Qualifiers Applied
CHRYSENE	23	20	14	50.00	
FLUORANTHENE	7.0	8.3	17	50.00	
PYRENE	7.5	8.4	11	50.00	

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-524-SA7-SB-1.0-2.0	SL-924-SA7-SB-1.0-2.0			
BENZO(A)ANTHRACENE	1.5	1.3	14	50.00	No Qualifiers Applied
BENZO(A)PYRENE	1.5	1.7	12	50.00	
BENZO(B)FLUORANTHENE	2.5	3.7	39	50.00	
BENZO(E)PYRENE	6.5	8.0	21	50.00	
BENZO(G,H,I)PERYLENE	1.3	1.0	26	50.00	
CHRYSENE	7.2	8.6	18	50.00	
FLUORANTHENE	0.96	1.1	14	50.00	
PHENANTHRENE	4.1	3.7	10	50.00	
BENZO(K)FLUORANTHENE	1.8 U	1.8	200	50.00	J(all detects) UJ(all non-detects)
DIBENZO(A,H)ANTHRACENE	0.75	1.8 U	200	50.00	
PYRENE	2.5	4.6	59	50.00	

Method: 9045M

Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-513-SA7-SB-0.0-0.5	SL-913-SA7-SB-0.0-0.5			
PH	6.68	6.72	1	50.00	No Qualifiers Applied

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-524-SA7-SB-1.0-2.0	SL-924-SA7-SB-1.0-2.0			
PH	8.18	8.30	1	50.00	No Qualifiers Applied



# Reporting Limit Outliers

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-513-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.28	5.09	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JBQ	1.06	5.09	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.876	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	3.18	5.09	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.913	5.09	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	1.87	5.09	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.242	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.451	5.09	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.702	5.09	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDD	JB	0.894	5.09	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.839	5.09	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.110	1.02	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.763	1.02	PQL	ng/Kg	
SL-516-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.123	4.96	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0727	4.96	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.165	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0727	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0778	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	0.0848	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JQ	0.0854	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0883	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.123	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.111	4.96	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDD	JB	0.0743	4.96	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.136	4.96	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0468	0.993	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0260	0.993	PQL	ng/Kg	
	OCDD	JB	0.498	9.93	PQL	ng/Kg	
	OCDF	JB	0.210	9.93	PQL	ng/Kg	
SL-524-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.69	5.22	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.644	5.22	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0837	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0453	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0973	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.171	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.129	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.108	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.122	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0892	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.646	5.22	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.177	5.22	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0763	5.22	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0213	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0282	1.04	PQL	ng/Kg	
	OCDF	JB	1.19	10.4	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-524-SA7-SB-1.0-2.0	1,2,3,4,6,7,8-HPCDD	JB	0.859	5.34	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.186	5.34	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0607	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0246	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0474	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.0966	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.0572	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.0998	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0748	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0475	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.156	5.34	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0368	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0555	5.34	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0250	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0189	1.07	PQL	ng/Kg	
	OCDD	JB	10.5	10.7	PQL	ng/Kg	
	OCDF	JBQ	0.277	10.7	PQL	ng/Kg	
SL-913-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.775	4.96	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.527	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.864	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	J	1.49	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	J	0.706	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.998	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.332	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.315	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.646	4.96	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.624	4.96	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.691	4.96	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0389	0.992	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.457	0.992	PQL	ng/Kg	
SL-924-SA7-SB-1.0-2.0	1,2,3,4,6,7,8-HPCDD	JB	0.270	5.37	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0678	5.37	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0329	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0417	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0488	5.37	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.0499	5.37	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.0296	5.37	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0755	5.37	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0603	5.37	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0567	5.37	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0904	5.37	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0408	5.37	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0338	5.37	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0139	1.07	PQL	ng/Kg	
	OCDD	JB	2.71	10.7	PQL	ng/Kg	
	OCDF	JB	0.135	10.7	PQL	ng/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method:** 6010C

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-513-SA7-SB-0.0-0.5	ANTIMONY	J	0.573	4.07	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.404	1.02	PQL	mg/Kg	
	BORON	J	6.16	10.2	PQL	mg/Kg	
	CADMIUM	J	0.513	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.773	2.04	PQL	mg/Kg	
	SODIUM	J	63.8	102	PQL	mg/Kg	
	TIN	J	2.71	10.2	PQL	mg/Kg	
SL-516-SA7-SB-0.0-0.5	Zirconium	J	2.22	5.09	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.538	1.02	PQL	mg/Kg	
	BORON	J	6.24	10.2	PQL	mg/Kg	
	CADMIUM	J	0.518	1.02	PQL	mg/Kg	
	MOLYBDENUM	J	0.331	2.04	PQL	mg/Kg	
	TIN	J	2.93	10.2	PQL	mg/Kg	
	Zirconium	J	2.72	5.10	PQL	mg/Kg	
SL-524-SA7-SB-0.0-0.5	ARSENIC	J	4.01	4.22	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.490	1.06	PQL	mg/Kg	
	BORON	J	2.52	10.6	PQL	mg/Kg	
	MOLYBDENUM	J	0.912	2.11	PQL	mg/Kg	
	TIN	J	2.76	10.6	PQL	mg/Kg	
SL-524-SA7-SB-1.0-2.0	Zirconium	J	3.19	5.28	PQL	mg/Kg	J (all detects)
	ARSENIC	J	3.93	4.16	PQL	mg/Kg	
	BERYLLIUM	J	0.480	1.04	PQL	mg/Kg	
	BORON	J	1.87	10.4	PQL	mg/Kg	
	CADMIUM	J	0.370	1.04	PQL	mg/Kg	
	COPPER	J	10.3	10.4	PQL	mg/Kg	
	MOLYBDENUM	J	0.777	2.08	PQL	mg/Kg	
SL-913-SA7-SB-0.0-0.5	TIN	J	3.08	10.4	PQL	mg/Kg	J (all detects)
	ANTIMONY	J	0.637	4.02	PQL	mg/Kg	
	BERYLLIUM	J	0.453	1.01	PQL	mg/Kg	
	BORON	J	6.30	10.1	PQL	mg/Kg	
	CADMIUM	J	0.511	1.01	PQL	mg/Kg	
	MOLYBDENUM	J	0.282	2.01	PQL	mg/Kg	
	SODIUM	J	63.2	101	PQL	mg/Kg	
SL-924-SA7-SB-1.0-2.0	TIN	J	2.90	10.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.48	5.03	PQL	mg/Kg	
	ARSENIC	J	4.15	4.25	PQL	mg/Kg	
	BERYLLIUM	J	0.518	1.06	PQL	mg/Kg	
	BORON	J	2.31	10.6	PQL	mg/Kg	
	CADMIUM	J	0.363	1.06	PQL	mg/Kg	
	COPPER	J	10.1	10.6	PQL	mg/Kg	
SL-924-SA7-SB-1.0-2.0	MOLYBDENUM	J	0.422	2.12	PQL	mg/Kg	J (all detects)
	TIN	J	3.11	10.6	PQL	mg/Kg	
	Zirconium	J	1.01	5.31	PQL	mg/Kg	
	ARSENIC	J	4.15	4.25	PQL	mg/Kg	
	BERYLLIUM	J	0.518	1.06	PQL	mg/Kg	

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-513-SA7-SB-0.0-0.5	SILVER	J	0.0323	0.204	PQL	mg/Kg	J (all detects)
	THALLIUM	J	0.202	0.204	PQL	mg/Kg	

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## Reporting Limit Outliers

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-516-SA7-SB-0.0-0.5	SELENIUM SILVER	J	0.108	0.408	PQL	mg/Kg	J (all detects)
		J	0.0368	0.204	PQL	mg/Kg	
SL-524-SA7-SB-0.0-0.5	SELENIUM SILVER	J	0.137	0.422	PQL	mg/Kg	J (all detects)
		J	0.0320	0.211	PQL	mg/Kg	
SL-924-SA7-SB-1.0-2.0	SILVER	J	0.0230	0.212	PQL	mg/Kg	J (all detects)

**Method:** 7471B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-513-SA7-SB-0.0-0.5	MERCURY	J	0.0151	0.0168	PQL	mg/Kg	J (all detects)
SL-516-SA7-SB-0.0-0.5	MERCURY	J	0.0108	0.0170	PQL	mg/Kg	J (all detects)

**Method:** 8015M

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-516-SA7-SB-0.0-0.5	EFH (C21-C30)	J	3.4	5.1	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	4.8	10	PQL	mg/Kg	

**Method:** 8081B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-513-SA7-SB-0.0-0.5	4,4'-DDE	J	0.53	1.7	PQL	ug/Kg	J (all detects)
	MIREX	J	0.63	1.7	PQL	ug/Kg	
SL-913-SA7-SB-0.0-0.5	MIREX	J	0.89	1.7	PQL	ug/Kg	J (all detects)

**Method:** 8082A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-513-SA7-SB-0.0-0.5	AROCLOR 1254	J	13	17	PQL	ug/Kg	J (all detects)
SL-913-SA7-SB-0.0-0.5	AROCLOR 1254	J	13	17	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	17	34	PQL	ug/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH046

Laboratory: LL

EDD Filename: PH046\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-513-SA7-SB-0.0-0.5	FLUORANTHENE	J	7.0	17	PQL	ug/Kg	J (all detects)
		J	7.5	17	PQL	ug/Kg	
SL-524-SA7-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.63	1.8	PQL	ug/Kg	
	BENZO(E)PYRENE	J	13	18	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.8	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-524-SA7-SB-1.0-2.0	BENZO(A)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(E)PYRENE	J	6.5	18	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.75	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.96	1.8	PQL	ug/Kg	
SL-913-SA7-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	13	17	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	8.3	17	PQL	ug/Kg	
	PYRENE	J	8.4	17	PQL	ug/Kg	
SL-924-SA7-SB-1.0-2.0	BENZO(A)ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(E)PYRENE	J	8.0	18	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	



LDC #: 30022B4

SDG #: PH046

Laboratory: Eurofins Lancaster Laboratories

## VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 7/22/13

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:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	SW MS/D	
VII.	Duplicate Sample Analysis	SW Dup	
VIII.	Laboratory Control Samples (LCS)	A LCS	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV.	Field Blanks	SW	*EB= EB1-060313, EB2-060313 (PH045)

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

FB= FB-041113 (PH029)

Validated Samples:

Soil

1	SL-513-SA7-SB-0.0-0.5	11	SL-524-SA7-SB-1.0-2.0MSD	21		31	
2	SL-913-SA7-SB-0.0-0.5	12	SL-524-SA7-SB-1.0-2.0DUP	22		32	
3	SL-516-SA7-SB-0.0-0.5	13		23		33	
4	SL-524-SA7-SB-1.0-2.0	14		24		34	
5	SL-524-SA7-SB-0.0-0.5	15		25		35	
6	SL-924-SA7-SB-1.0-2.0	16		26		36	
7	SL-513-SA7-SB-0.0-0.5MS	17		27		37	
8	SL-513-SA7-SB-0.0-0.5MSD	18		28		38	
9	SL-513-SA7-SB-0.0-0.5DUP	19		29		39	
10	SL-524-SA7-SB-1.0-2.0MS	20		30		40	

Notes:



LDC #: 30025B4

VALIDATION FINDINGS WORKSHEET  
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

Soil preparation factor applied: 100x

Reason Code: B

Sample Concentration units, unless otherwise noted: ug/L

Associated Samples: 1-3

Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/l )	Maximum ICB/CCB <sup>a</sup> (ug/l )	Action Level	1	2	3						
Mo			3.6	1.8	0.77	0.28	0.33						

Sample Concentration units, unless otherwise noted: ug/L

Associated Samples: 4, 6

Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/l )	Maximum ICB/CCB <sup>a</sup> (ug/l )	Action Level	4	6							
Mo			3.7	1.85	0.78	0.42							

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 #: 30022B4

**VALIDATION FINDINGS WORKSHEET**  
**Field Blanks**Page: 1 of 1  
Reviewer: ca  
2nd Reviewer: in**METHOD:** Trace Metals (EPA SW846 6010B/7000)**Blank units:** mg/L **Associated sample units:** mg/Kg

Reason: F

**Sampling date:** 4/11/13 Soil factor applied 100x**Field blank type:** (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ **Associated Samples:** All

Analyte	Blank ID	Sample Identification										
	FB-041113 (SDG: PH029)	Action Limit	1	2	3	4	5	6				
Cu	0.0036	1.8										
Mo	0.0036	1.8	0.77	0.28	0.33	0.78	0.91	0.42				

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".





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# QUALITY ASSURANCE SUMMARY

FORM 5A (MS/MSD)

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

SDG No.: PH046

Matrix: SOIL

Level

(low/med):

LOW

Associate with  
Samples 1 → 3

74x

Background Lab Sample ID: 7081058BKG Matrix Spike Lab Sample ID: 7081059MS Matrix Spike Duplicate Lab Sample ID: 7081060MSD  
Batch Id(s): P16037A, P16038B

Analyte	Mass	BKG Sample		MS Sample		MSD Sample		MS Spike Added	MSD Spike Added	Units	MS		MSD		RPD	Control Limit		M	
		Result	C	Result	C	Result	C				%R	Q	%R	Q		%R	RPD		
Aluminum		8891.2580		12135.0200		11977.2100		200.0000	200.0000	MG/KG	1622		1543		1		20	P	
Antimony		0.5630	B	41.0390		41.2710		50.0000	50.0000	MG/KG	81		81		1	75 - 125	20	P	
Arsenic		4.1040		20.0340		20.0180		15.0000	15.0000	MG/KG	106		106		0	75 - 125	20	P	
Barium		60.2450		265.8500		275.3810		200.0000	200.0000	MG/KG	103		108		4	75 - 125	20	P	
Beryllium		0.3970	B	5.4840		5.5600		5.0000	5.0000	MG/KG	102		103		1	75 - 125	20	P	
Boron		6.0500	B	198.1100		201.8330		200.0000	200.0000	MG/KG	96		98		2	75 - 125	20	P	
Cadmium		0.5040	B	5.4030		5.4390		5.0000	5.0000	MG/KG	98		99		1	75 - 125	20	P	
Calcium		2409.4590		2916.1790		2852.7140		400.0000	400.0000	MG/KG	127		111		2			20	P
Chromium		11.3860		33.1480		32.2420		20.0000	20.0000	MG/KG	109		104		3	75 - 125	20	P	
Cobalt		3.7010		52.4120		52.6470		50.0000	50.0000	MG/KG	97		98		0	75 - 125	20	P	
Copper		5.2730		30.0230		31.2060		25.0000	25.0000	MG/KG	99		104		4	75 - 125	20	P	
Iron		16068.9670		17681.3510		17419.9070		100.0000	100.0000	MG/KG	1612		1351		1			20	P
Lead		7.6700		22.8300		22.7040		15.0000	15.0000	MG/KG	101		100		1	75 - 125	20	P	
Lithium		21.8040		126.5500		127.2380		100.0000	100.0000	MG/KG	105		105		1	75 - 125	20	P	
Magnesium		3488.8380		4195.6450		4237.5910		200.0000	200.0000	MG/KG	353		374		1			20	P
Manganese		239.0870		301.4110		303.3800		50.0000	50.0000	MG/KG	125		129		1			20	P
Mercury		0.0148	B	0.1793		0.1743		0.1606	0.1603	MG/KG	102		100		3	65 - 135	20	CV	
Molybdenum		0.7590	B	196.3880		198.4310		200.0000	200.0000	MG/KG	98		99		1	75 - 125	20	P	
Nickel		6.6990		56.8560		56.3950		50.0000	50.0000	MG/KG	100		99		1	75 - 125	20	P	
Phosphorus		378.4570		481.2100		492.2680		100.0000	100.0000	MG/KG	103		114		2	75 - 125	20	P	
Potassium		2929.6960		4434.0770		4423.3090		1000.0000	1000.0000	MG/KG	150	N	149	N	0	75 - 125	20	P	
Selenium	78	0.1000	U	2.1300		2.1680		2.0000	2.0000	MG/KG	107		108		2	75 - 125	20	MS	
Silver	107	0.0317	B	9.7260		9.8560		10.0000	10.0000	MG/KG	97		98		1	75 - 125	20	MS	
Sodium		62.6850	B	1062.2240		1070.8190		1000.0000	1000.0000	MG/KG	100		101		1	75 - 125	20	P	
Strontium	88	8.5360		16.0780		16.0520		8.0000	8.0000	MG/KG	94		94		0	75 - 125	20	MS	
Thallium	203	0.1980	B	0.6462		0.6244		0.4000	0.4000	MG/KG	112		107		3	75 - 125	20	MS	
Tin		2.6620	B	373.2980		372.4550		400.0000	400.0000	MG/KG	93		92		0	75 - 125	20	P	
Titanium		928.0980		1368.6410		1333.8010		100.0000	100.0000	MG/KG	441		406		3			20	P
Vanadium		24.5540		76.3400		76.8470		50.0000	50.0000	MG/KG	104		105		1	75 - 125	20	P	
Zinc		66.1420		120.9410		121.5600		50.0000	50.0000	MG/KG	110		111		1	75 - 125	20	P	
Zirconium		2.1780	B	102.4020		103.1070		100.0000	100.0000	MG/KG	100		101		1	75 - 125	20	P	

Note: Results shown are reported on an as-received basis.

## METHODS:

P = ICP Atomic Emission Spectrometer

CV = Cold Vapor

MS = ICP Mass Spectrometry

AF = Cold Vapor Atomic Fluorescence

## CONCENTRATION QUALIFIERS:

U= Below MDL, B= Below LOQ

## FLAGS:

N = Matrix Spike OOS, \* = Duplicate OOS





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Associate with  
Samples 4 & 6

74x

# QUALITY ASSURANCE SUMMARY

FORM 5A (MS/MSD)

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

SDG No.: PH046

Matrix: SOIL

Level

(low/med):

LOW

Background Lab Sample ID: 7081064BKG Matrix Spike Lab Sample ID: 7081065MS Matrix Spike Duplicate Lab Sample ID: 7081066MSD  
Batch Id(s): P16037C, P16438A

Analyte	Mass	BKG Sample		MS Sample		MSD Sample		MS Spike Added	MSD Spike Added	Units	MS		MSD		RPD	Control Limit		M	
		Result	C	Result	C	Result	C				%R	Q	%R	Q		%R	RPD		
Aluminum		11391.6279		14641.9442		14151.2760		192.3077	192.3077	MG/KG	1690		1435		3		20	P	
Antimony		0.4808	U	37.2298		37.7279		48.0769	48.0769	MG/KG	77		78		1	75 - 125	20	P	
Arsenic		3.6375	B	18.9865		18.6087		14.4231	14.4231	MG/KG	106		104		2	75 - 125	20	P	
Barium		81.5240		289.6654		280.1125		192.3077	192.3077	MG/KG	108		103		3	75 - 125	20	P	
Beryllium		0.4442	B	5.4779		5.4337		4.8077	4.8077	MG/KG	105		104		1	75 - 125	20	P	
Boron		1.7260	B	198.1298		197.6385		192.3077	192.3077	MG/KG	102		102		0	75 - 125	20	P	
Cadmium		0.3423	B	5.0913		5.0471		4.8077	4.8077	MG/KG	99		98		1	75 - 125	20	P	
Calcium		5160.0731		6642.6212		6062.3250		384.6154	384.6154	MG/KG	385		235		9			20	P
Chromium		17.0865		38.8692		37.5019		19.2308	19.2308	MG/KG	113		106		4	75 - 125	20	P	
Cobalt		4.2433		51.8048		51.2058		48.0769	48.0769	MG/KG	99		98		1	75 - 125	20	P	
Copper		9.5337	B	35.5048		35.2260		24.0385	24.0385	MG/KG	108		107		1	75 - 125	20	P	
Iron		20390.9221		22882.8538		21273.7385		96.1538	96.1538	MG/KG	2592		918		7			20	P
Lead		5.2644		19.9096		19.1644		14.4231	14.4231	MG/KG	102		96		4	75 - 125	20	P	
Lithium		25.3654		125.9087		123.8788		96.1538	96.1538	MG/KG	105		102		2	75 - 125	20	P	
Magnesium		4472.8356		5309.3077		5038.4442		192.3077	192.3077	MG/KG	435		294		5			20	P
Manganese		259.2260		337.9500		327.4981		48.0769	48.0769	MG/KG	164		142		3			20	P
Mercury		0.0099	U	0.1642		0.1568		0.1639	0.1607	MG/KG	100		98		5	65 - 135	20	CV	
Molybdenum		0.7183	B	190.0981		189.3442		192.3077	192.3077	MG/KG	98		98		0	75 - 125	20	P	
Nickel		7.3029		56.8538		56.1779		48.0769	48.0769	MG/KG	103		102		1	75 - 125	20	P	
Phosphorus		370.7923		521.0038		474.3904		96.1538	96.1538	MG/KG	156	N	108		9	75 - 125	20	P	
Potassium		2988.6212		4313.2481		3954.5837		961.5385	961.5385	MG/KG	138	N	100		9	75 - 125	20	P	
Selenium	78	0.0962	U	2.1865		2.0288		1.9231	1.9231	MG/KG	114		105		7	75 - 125	20	MS	
Silver	107	0.0192	U	10.1500		9.9269		9.6154	9.6154	MG/KG	106		103		2	75 - 125	20	MS	
Sodium		114.2154		1092.4087		1075.4317		961.5385	961.5385	MG/KG	102		100		2	75 - 125	20	P	
Strontium	88	16.5654		26.1154		25.4423		7.6923	7.6923	MG/KG	124		115		3	75 - 125	20	MS	
Thallium	203	0.2635		0.6206		0.6150		0.3846	0.3846	MG/KG	93		91		1	75 - 125	20	MS	
Tin		2.8519	B	357.6577		356.7990		384.6154	384.6154	MG/KG	92		92		0	75 - 125	20	P	
Titanium		1186.5106		1540.1423		1457.7731		96.1538	96.1538	MG/KG	368		282		5			20	P
Vanadium		30.4010		85.0702		82.6490		48.0769	48.0769	MG/KG	114		109		3	75 - 125	20	P	
Zinc		54.7942		106.4000		102.3029		48.0769	48.0769	MG/KG	107		99		4	75 - 125	20	P	
Zirconium		0.7981	U	98.0327		97.4481		96.1538	96.1538	MG/KG	102		101		1	75 - 125	20	P	

Note: Results shown are reported on an as-received basis.

## METHODS:

P = ICP Atomic Emission Spectrometer

CV = Cold Vapor

MS = ICP Mass Spectrometry

AF = Cold Vapor Atomic Fluorescence

## CONCENTRATION QUALIFIERS:

U= Below MDL; B= Below LOQ

## FLAGS:

N = Matrix Spike OOS, \* = Duplicate OOS



Background Lab Sample ID: 7081058BKG

Duplicate Lab Sample ID: 7081061DUP

Batch ID(s): P16037A, P16038B

Concentration Units: MG/KG

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			8891.2580		9904.9130		11		P
Antimony			0.5630	B	0.5000	U	200		P
Arsenic		4.0	4.1040		4.6160		12		P
Barium			60.2450		64.4470		7		P
Beryllium			0.3970	B	0.4430	B	11		P
Boron			6.0500	B	6.1510	B	2		P
Cadmium			0.5040	B	0.5250	B	4		P
Calcium			2409.4590		2285.0050		5		P
Chromium		3.0	11.3860		13.0350		14		P
Cobalt		1.0	3.7010		3.8890		5		P
Copper		2.0	5.2730		5.5080		4		P
Iron			16068.9670		17513.1990		9		P
Lead		3.0	7.6700		8.6030		11		P
Lithium			21.8040		24.3770		11		P
Magnesium			3488.8380		3879.8810		11		P
Manganese			239.0870		255.8600		7		P
Mercury			0.0148	B	0.0141	B	5		CV
Molybdenum			0.7590	B	0.3850	B	65		P
Nickel		2.0	6.6990		8.2530		21		P
Phosphorus			378.4570		382.6370		1		P
Potassium			2929.6960		3177.4650		8		P
Selenium	78		0.1000	U	0.1000	U			MS
Silver	107		0.0317	B	0.0200	U	200		MS
Sodium			62.6850	B	67.9960	B	8		P
Strontium	88		8.5360		8.2640		3		MS
Thallium	203	0.2	0.1980	B	0.2294		15		MS
Tin			2.6620	B	2.6760	B	1		P
Titanium			928.0980		1038.5040		11		P
Vanadium			24.5540		28.0360		13		P
Zinc			66.1420		71.2380		7		P
Zirconium			2.1780	B	2.9660	B	31		P

NOTE: An asterisk (\*) in column "Q" indicates poor duplicate precision (RPD > 20% OR  $|(S) - (D)| > LOQ$  for values < 5x LOQ).

The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

ols by difference

Note: Results shown are reported on an as-received basis.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	2877 = Duplicate Out of Spec



QUALITY ASSURANCE SUMMARY

FORM 6

DUPLICATES

SDG No.: PH046

Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 7081064BKG

Duplicate Lab Sample ID: 7081067DUP

Batch ID(s): P16037C, P16438A

Concentration Units: MG/KG

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			11391.6279		12946.9067		13		P
Antimony			-1.0625	B	-1.5413	B	-37		P
Arsenic		3.8	3.6375	B	4.4625		20		P
Barium			81.5240		97.6106		18		P
Beryllium			0.4442	B	0.5269	B	17		P
Boron			1.7260	B	1.3096	B	27		P
Cadmium			0.3423	B	0.3375	B	1		P
Calcium			5160.0731		7875.7567		42	*	P
Chromium			17.0865		19.8288		15		P
Cobalt		1.0	4.2433		4.9308		15		P
Copper		9.6	9.5337	B	11.4808		19		P
Iron			20390.9221		23069.3808		12		P
Lead		2.9	5.2644		6.0538		14		P
Lithium			25.3654		27.1010		7		P
Magnesium			4472.8356		4969.3808		11		P
Manganese			259.2260		275.4308		6		P
Mercury			0.0099	U	0.0095	U			CV
Molybdenum			0.7183	B	0.3615	B	66		P
Nickel		1.9	7.3029		9.5365		27	*	P
Phosphorus			370.7923		449.1423		19		P
Potassium			2988.6212		3296.0173		10		P
Selenium	78		0.0962	U	0.0962	U			MS
Silver	107		0.0192	U	0.0203	B	200		MS
Sodium		96.2	114.2154		126.5356		10		P
Strontium	88		16.5654		22.6154		31	*	MS
Thallium	203	0.2	0.2635		0.2658		1		MS
Tin			2.8519	B	2.8471	B	0		P
Titanium			1186.5106		1322.2452		11		P
Vanadium			30.4010		33.5615		10		P
Zinc			54.7942		61.0846		11		P
Zirconium			0.7981	U	1.0490	B	200		P

NOTE: An asterisk (\*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).

The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

*ok by difference*

*Compare with 4 & 6*

Note: Results shown are reported on an as-received basis.

<b>METHODS:</b> P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence	<b>CONCENTRATION QUALIFIERS:</b> U= Below MDL B= Below LOQ <b>FLAGS:</b> = Duplicate Out of Spec
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QUALITY ASSURANCE SUMMARY

FORM 9

SERIAL DILUTIONS

SDG No.: PH046

Matrix: SOIL

Level

LOW

(low/med):

Background Lab Sample ID: 7081064BKG

Serial Dilution Lab Sample ID: 7081064L

Batch ID(s): P16037C

Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		118472.9300		116848.8500		1		P
Antimony		5.0000	U	25.0000	U			P
Arsenic		37.8300	B	19.2000	B	49		P
Barium		847.8500		846.8500		0		P
Beryllium		4.6200	B	3.8000	B	18		P
Boron		17.9500	B	45.1000	B	151		P
Cadmium		3.5600	B	6.2000	B	74		P
Calcium		53664.7600		53144.2500		1		P
Chromium		177.7000		174.9500		2		P
Cobalt		44.1300		44.3500	B	0		P
Copper		19.8300	B	26.2000	B	32		P
Iron		212065.5900		187779.9000		11	E	P
Lead		54.7500		49.8000	B	9		P
Lithium		263.8000		241.6000		8		P
Magnesium		46517.4900		45834.9500		1		P
Manganese		2695.9500		2700.9500		0		P
Molybdenum		7.4700	B	34.7000	B	365		P
Nickel		75.9500		74.3500	B	2		P
Phosphorus		3856.2400		3768.8000		2		P
Potassium		31081.6600		29993.4000		4		P
Selenium	78	0.5000	U	2.5000	U			MS
Silver	107	0.1000	U	0.5000	U			MS
Sodium		1187.8400		1421.4000	B	20		P
Strontium	88	86.1400		85.3500		1		MS
Thallium	203	1.3700		1.5925	B	16		MS
Tin		29.6600	B	25.1500	B	15		P
Titanium		12339.7100		12221.2000		1		P
Vanadium		316.1700		307.0500		3		P
Zinc		569.8600		565.3000		1		P
Zirconium		8.3000	U	41.5000	U			P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

5/05/A

associate w/ 4 + 6

METHODS:

P = ICP Atomic Emission Spectrometer  
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:

U = Below MDL  
B = Below LOQ

FLAGS:

E = Matrix Effects exist as proven by  
Serial Dilution or Spiked Dilution



## **Enclosure II**

### **Level IV Validation Reports**



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** June 4, 2013  
**LDC Report Date:** July 29, 2013  
**Matrix:** Soil/Water  
**Parameters:** Total Petroleum Hydrocarbons as Gasoline  
**Validation Level:** Level IV  
**Laboratory:** Eurofins  
**Sample Delivery Group (SDG):** PH046

**Sample Identification**

SL-524-SA7-SB-1.0-2.0  
SL-924-SA7-SB-1.0-2.0  
TB-060413  
SL-524-SA7-SB-1.0-2.0MS  
SL-524-SA7-SB-1.0-2.0MSD



## Introduction

This data review covers 4 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

## **III. Calibration Verification**

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-060413 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

Samples EB1-060313 and EB2-060313 (both from SDG PH045) were identified as equipment blanks. No total petroleum hydrocarbons as gasoline contaminants were found.

Sample FB-041113 (from SDG PH029) was identified as a field blank. No total petroleum hydrocarbons as gasoline contaminants were found.

## **V. Surrogate Recovery**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.



## VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Target Compound Identification

All target compound identifications were within validation criteria.

## IX. Compound Quantitation

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 PH046	All compounds reported below the RL.	J (all detects)	A

## X. System Performance

The system performance was acceptable.

## XI. Overall Assessment of Data

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

## XII. Field Duplicates

Samples SL-524-SA7-SB-1.0-2.0 and SL-924-SA7-SB-1.0-2.0 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples.



**Santa Susana Field Laboratory**

**Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG PH046**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH046	SL-524-SA7-SB-1.0-2.0 SL-924-SA7-SB-1.0-2.0 TB-060413	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**

**Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG PH046**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**

**Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG PH046**

No Sample Data Qualified in this SDG



**METHOD:** GC TPH as Gasoline (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	Δ	Sampling dates: 6/4/13
II.	Initial calibration	Δ	96 PSD ≤ 20
III.	Calibration verification/ICV	Δ	1CV/CCV ≤ 20
IV.	Blanks	Δ	
V.	Surrogate recovery	Δ	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	Δ	1CS/1D
VIII.	Target compound identification	Δ	
IX.	Compound quantitation/RL/LOQ/LODs	Δ	
X.	System Performance	Δ	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1, 2
XIII.	Field blanks	ND	TB = 3 EB = EB1-060313 / SPG# = EB2-060313 / PH045

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples:

soil + water

FB = FB-041113 (SDG # PH029)

1	SL-524-SA7-SB-1.0-2.0	3	11	BLKCV	21		31	
2	SL-924-SA7-SB-1.0-2.0	↓	12	BLKDJ	22		32	
3	TB-060413	W	13		23		33	
4	SL-524-SA7-SB-1.0-2.0MS		14		24		34	
5	SL-524-SA7-SB-1.0-2.0MSD		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 #: 30022B7

## VALIDATION FINDINGS CHECKLIST

Page: 1 of 2  
Reviewer: FT  
2nd Reviewer: AMethod: ✓ GC        HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<u>✓</u>			
Cooler temperature criteria was met.	<u>✓</u>			
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<u>✓</u>			
Were all percent relative standard deviations (%RSD) < 20%?	<u>✓</u>			
Was a curve fit used for evaluation?		<u>✓</u>		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			<u>✓</u>	
Were the RT windows properly established?	<u>✓</u>			
<b>IV. Continuing calibration</b>				
Was a continuing calibration analyzed daily?	<u>✓</u>			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	<u>✓</u>			
Were all the retention times within the acceptance windows?	<u>✓</u>			
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<u>✓</u>			
Was a method blank analyzed for each matrix and concentration?	<u>✓</u>			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		<u>✓</u>		
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<u>✓</u>			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			<u>✓</u>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<u>✓</u>			
Was a MS/MSD analyzed every 20 samples of each matrix?	<u>✓</u>			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<u>✓</u>			
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<u>✓</u>			
Was an LCS analyzed per extraction batch?	<u>✓</u>			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<u>✓</u>			
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?			<u>✓</u>	
Were the performance evaluation (PE) samples within the acceptance limits?			<u>✓</u>	



LDC #: 30022 B7

## VALIDATION FINDINGS CHECKLIST

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

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field duplicates.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
XV. Field blanks				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field blanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



LDC #: 30022B7

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 1  
Reviewer: 7  
2nd Reviewer: 7

METHOD: GC        HPLC       

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C

Average CF = sum of the CF/number of standards

%RSD = 100 \* (S/X)

Where: A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF ( <u>550</u> std)	CF ( <u>550</u> std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	1CAL	1/12/12	GRU	6717.167	6717.167	6268.898	6268.898	9.219	9.219
				( <u>220</u> )	( <u>220</u> )				
2	1CAL	5/23/12	GRU	60596.95	60596.95	61516.39	61516.39	2.548	2.548
3									
4									

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



LDC #: 30022B7

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Results Verification**

Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: [Signature]

METHOD: GC        HPLC       

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

$$\% \text{ Difference} = 100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$$

Where: ave. CF = initial calibration average CF  
CF = continuing calibration CF  
A = Area of compound  
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/ Conc. CCV	CF/ Conc. CCV	%D	%D
1	cen 20.56	6/11/13	GRU	1100.0	1047.56	1047.56	5	5
2	cen 14:07	6/9/13	↓	220.0	231.0	231.0	5	5
3								
4								

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



LDC #: 3 6022 B7VALIDATION FINDINGS WORKSHEET  
Surrogate Results VerificationPage: 1 of 1Reviewer: F72nd reviewer: ↖METHOD: ✓ GC    HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TF7	DB-VRX	30	24.069	81	80.23	0.95

Sample ID:           

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:           

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 30022B7VALIDATION FINDINGS WORKSHEET  
Surrogate Results VerificationPage: 1 of 1Reviewer: F72nd reviewer: QMETHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TFT	DB-VRX	680	550.952	81	81	0

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 30022B7VALIDATION FINDINGS WORKSHEET  
Surrogate Results VerificationPage: 1 of 1Reviewer: F72nd reviewer: AMETHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TFT	DB-YRX	0.300	0.24056	81	80.2	0.98

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

METHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where

SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

$$\text{RPD} = ((\text{SSCMS} - \text{SSCMSD}) * 2) / (\text{SSCMS} + \text{SSCMSD}) * 100$$

MS = Matrix spike

MSD = Matrix spike duplicate

MS/MSD samples: 4 & 5

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
			---			Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	10.2	10.2	ND	10.52	9.77	103	103	101	101	7	7
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

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



LDC #: 30022137

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

## Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: F72nd Reviewer: GAMETHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery =  $100 * (SSC - SC) / SA$ 

Where SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

RPD =  $\frac{((SSCLCS - SSCLCSD) * 2)}{(SSCLCS + SSCLCSD)} * 100$ 

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1cs 1p

Compound	Spike Added ( ug/L )		Sample Conc. ( ug/L )	Spike Sample Concentration ( ug/L )		LCS		LCSD		LCS/LCSD	
						Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD		---	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported
Gasoline (8015)	1100	1100	ND	1152.45	1108.8	105	105	101	101	4	4
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 3002287**VALIDATION FINDINGS WORKSHEET**  
**Sample Calculation Verification**Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: ✓METHOD: ✓ GC    HPLCY N N/A  
Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration=  $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$ 

Example:

Sample ID. 1CSXK Compound Name GRO

A= Area or height of the compound to be measured

Fv= Final Volume of extract

Df= Dilution Factor

RF= Average response factor of the compound  
In the initial calibration

Vs= Initial volume of the sample

Ws= Initial weight of the sample

%S= Percent Solid

Concentration =  $\frac{7224701.40}{6268.898}$   
  
 $= 1152.46$ 

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: \_\_\_\_\_



## **Attachment I**

### **Sample ID Cross Reference and Data Review Level**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Jun-2013	SL-514-SA7-SB-0.0-0.5	7085553	N	3050B	6010C	IV
06-Jun-2013	SL-514-SA7-SB-0.0-0.5	7085553	N	3050B	6020A	IV
06-Jun-2013	SL-514-SA7-SB-0.0-0.5	7085553	N	3546	8015M	IV
06-Jun-2013	SL-514-SA7-SB-0.0-0.5	7085553	N	3546	8082A	IV
06-Jun-2013	SL-514-SA7-SB-0.0-0.5	7085553	N	3546	8270D SIM	IV
06-Jun-2013	SL-514-SA7-SB-0.0-0.5	7085553	N	METHOD	1613B	IV
06-Jun-2013	SL-514-SA7-SB-0.0-0.5	7085553	N	METHOD	7471B	IV
06-Jun-2013	SL-515-SA7-SB-0.0-0.5	7085554	N	3050B	6010C	IV
06-Jun-2013	SL-515-SA7-SB-0.0-0.5	7085554	N	3050B	6020A	IV
06-Jun-2013	SL-515-SA7-SB-0.0-0.5	7085554	N	3546	8015M	IV
06-Jun-2013	SL-515-SA7-SB-0.0-0.5	7085554	N	3546	8081B	IV
06-Jun-2013	SL-515-SA7-SB-0.0-0.5	7085554	N	3546	8082A	IV
06-Jun-2013	SL-515-SA7-SB-0.0-0.5	7085554	N	3546	8270D SIM	IV
06-Jun-2013	SL-515-SA7-SB-0.0-0.5	7085554	N	METHOD	1613B	IV
06-Jun-2013	SL-515-SA7-SB-0.0-0.5	7085554	N	METHOD	7471B	IV



## **Attachment II**

### **Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-514-SA7-SB-0.0-0.5

Collected: 6/6/2013 8:55:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.476	J	0.0677	MDL	1.01	PQL	mg/Kg	J	Z
BORON	2.55	J	0.839	MDL	10.1	PQL	mg/Kg	J	Z
CADMIUM	0.397	J	0.0334	MDL	1.01	PQL	mg/Kg	J	Z
CALCIUM	3260		4.06	MDL	20.2	PQL	mg/Kg	J	E
IRON	23600		3.84	MDL	40.4	PQL	mg/Kg	J	A
NICKEL	8.44		0.111	MDL	2.02	PQL	mg/Kg	J	E
PHOSPHORUS	417		0.516	MDL	10.1	PQL	mg/Kg	J	Q
POTASSIUM	2600		13.7	MDL	101	PQL	mg/Kg	J	Q
TIN	2.78	J	0.222	MDL	10.1	PQL	mg/Kg	U	B

Sample ID: SL-515-SA7-SB-0.0-0.5

Collected: 6/6/2013 9:15:00 AM

Analysis Type: REA

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.75	J	0.886	MDL	9.85	PQL	mg/Kg	J	Z

Sample ID: SL-515-SA7-SB-0.0-0.5

Collected: 6/6/2013 9:15:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.439	J	0.0660	MDL	0.985	PQL	mg/Kg	J	Z
BORON	1.67	J	0.817	MDL	9.85	PQL	mg/Kg	J	Z
CADMIUM	0.404	J	0.0325	MDL	0.985	PQL	mg/Kg	J	Z
CALCIUM	12000		3.96	MDL	19.7	PQL	mg/Kg	J	E
IRON	23100		3.74	MDL	39.4	PQL	mg/Kg	J	A
NICKEL	7.22		0.108	MDL	1.97	PQL	mg/Kg	J	E
PHOSPHORUS	438		0.502	MDL	9.85	PQL	mg/Kg	J	Q
POTASSIUM	2750		13.3	MDL	98.5	PQL	mg/Kg	J	Q
SODIUM	81.3	J	16.4	MDL	98.5	PQL	mg/Kg	J	Z
TIN	2.96	J	0.217	MDL	9.85	PQL	mg/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

<b>Method Category:</b>	<b>METALS</b>
<b>Method:</b>	<b>6020A</b>
<b>Matrix:</b>	<b>SO</b>

Sample ID: SL-514-SA7-SB-0.0-0.5			Collected: 6/6/2013 8:55:00 AM		Analysis Type: REA		Dilution: 2		
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.101	MDL	0.404	PQL	mg/Kg	J	Z

Sample ID: SL-514-SA7-SB-0.0-0.5			Collected: 6/6/2013 8:55:00 AM		Analysis Type: RES			Dilution: 2	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0339	J	0.0202	MDL	0.202	PQL	mg/Kg	J	Z
STRONTIUM	15.7		0.0344	MDL	0.404	PQL	mg/Kg	J	E

Sample ID: SL-515-SA7-SB-0.0-0.5			Collected: 6/6/2013 9:15:00 AM		Analysis Type: REA			Dilution: 2	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.105	J	0.0985	MDL	0.394	PQL	mg/Kg	J	Z

Sample ID: SL-515-SA7-SB-0.0-0.5			Collected: 6/6/2013 9:15:00 AM		Analysis Type: RES			Dilution: 2	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	17.2		0.0335	MDL	0.394	PQL	mg/Kg	J	E

<b>Method Category:</b>	<b>METALS</b>
<b>Method:</b>	<b>7471B</b>
<b>Matrix:</b>	<b>SO</b>

Sample ID: SL-515-SA7-SB-0.0-0.5			Collected: 6/6/2013 9:15:00 AM		Analysis Type: RES			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0112	J	0.0101	MDL	0.0168	PQL	mg/Kg	J	Z

<b>Method Category:</b>	<b>SVOA</b>
<b>Method:</b>	<b>1613B</b>
<b>Matrix:</b>	<b>SO</b>

Sample ID: SL-514-SA7-SB-0.0-0.5			Collected: 6/6/2013 8:55:00 AM		Analysis Type: RES			Dilution: 1	
Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	4.01	JB	0.0338	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.29	J	0.0405	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	3.93	JB	0.0434	MDL	4.96	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-514-SA7-SB-0.0-0.5

Collected: 6/6/2013 8:55:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	2.73	JB	0.0315	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.02	JB	0.0385	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.458	JB	0.0834	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	3.12	JB	0.0338	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	3.13	JB	0.0310	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.48	JB	0.0328	MDL	4.96	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0421	JQ	0.0257	MDL	0.992	PQL	ng/Kg	J	Z

Sample ID: SL-515-SA7-SB-0.0-0.5

Collected: 6/6/2013 9:15:00 AM

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.47	JB	0.0282	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.366	JB	0.0141	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0673	JB	0.0213	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0344	JQ	0.0313	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0372	JBQ	0.0150	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.170	JB	0.0317	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0968	JB	0.0306	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0614	JBQ	0.0166	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0929	JBQ	0.0163	MDL	5.04	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0618	JBQ	0.0146	MDL	5.04	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0419	JQ	0.0383	MDL	1.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0312	JQ	0.0243	MDL	1.01	PQL	ng/Kg	J	Z
OCDF	0.979	JB	0.0233	MDL	10.1	PQL	ng/Kg	J	Z

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-515-SA7-SB-0.0-0.5

Collected: 6/6/2013 9:15:00 AM

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	1.9	U	0.97	MDL	1.9	PQL	ug/Kg	UJ	L

\* denotes a non-reportable result

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## Data Qualifier Summary

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

**Sample ID:** SL-514-SA7-SB-0.0-0.5

**Collected:** 6/6/2013 8:55:00 AM

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	5.1	J	3.3	MDL	17	PQL	ug/Kg	J	Z
FLUORANTHENE	6.8	J	6.7	MDL	17	PQL	ug/Kg	J	Z

**Sample ID:** SL-515-SA7-SB-0.0-0.5

**Collected:** 6/6/2013 9:15:00 AM

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.34	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## Data Qualifier Summary

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
<b>*#</b>	Professional Judgment
A	ICP Serial Dilution
B	Method Blank Contamination
E	Laboratory Duplicate Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Upper Estimation
Q	Laboratory Duplicate Precision
Q	Matrix Spike Upper Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3 Subarea 7

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## **Enclosure I**

### **Level III ADR Outliers (including Manual Review Outliers)**



# Quality Control Outlier Reports

PH049



# Method Blank Outlier Report

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

<b>Method:</b> 1613B <b>Matrix:</b> SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1650B371148	6/18/2013 11:48:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0445 ng/Kg 0.0586 ng/Kg 0.0448 ng/Kg 0.0411 ng/Kg 0.0389 ng/Kg 0.0374 ng/Kg 0.0490 ng/Kg 0.0753 ng/Kg 0.0542 ng/Kg 0.0711 ng/Kg 0.0261 ng/Kg 0.0370 ng/Kg 0.385 ng/Kg 0.124 ng/Kg	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-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-515-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0673 ng/Kg	0.0673U ng/Kg
SL-515-SA7-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0372 ng/Kg	0.0372U ng/Kg
SL-515-SA7-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.170 ng/Kg	0.170U ng/Kg
SL-515-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.0968 ng/Kg	0.0968U ng/Kg
SL-515-SA7-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0614 ng/Kg	0.0614U ng/Kg
SL-515-SA7-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0929 ng/Kg	0.0929U ng/Kg
SL-515-SA7-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0618 ng/Kg	0.0618U ng/Kg

<b>Method:</b> 6010C <b>Matrix:</b> SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16037CB220935	6/13/2013 9:35:00 AM	CALCIUM	6.15 mg/Kg	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-SB-0.0-0.5
P16037CB222021	6/12/2013 8:21:00 PM	IRON PHOSPHORUS TIN	4.39 mg/Kg 1.17 mg/Kg 1.43 mg/Kg	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-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-514-SA7-SB-0.0-0.5(RES)	TIN	2.78 mg/Kg	2.78U mg/Kg
SL-515-SA7-SB-0.0-0.5(RES)	TIN	2.96 mg/Kg	2.96U mg/Kg



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 8081B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P31627AQ242304A (SL-515-SA7-SB-0.0-0.5)	4,4'-DDD	142	-	76.00-138.00	-	4,4'-DDD	J (all detects)
	4,4'-DDT	134	-	72.00-131.00	-	4,4'-DDT	
	ENDOSULFAN II	137	-	68.00-128.00	-	ENDOSULFAN II	
	ENDRIN KETONE	138	-	74.00-127.00	-	ENDRIN KETONE	
	gamma-BHC (Lindane)	136	-	72.00-128.00	-	gamma-BHC (Lindane)	
	HEPTACHLOR	128	-	69.00-125.00	-	HEPTACHLOR	
P31627AQ242304A (SL-515-SA7-SB-0.0-0.5)	BETA-BHC	71	-	76.00-123.00	-	BETA-BHC	J(all detects) UJ(all non-detects)

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-514-SA7-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	4.01	4.96	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	1.29	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	3.93	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	2.73	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	2.02	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.458	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	3.12	4.96	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	3.13	4.96	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.48	4.96	PQL	ng/Kg	
SL-515-SA7-SB-0.0-0.5	2,3,7,8-TCDD	JQ	0.0421	0.992	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDD	JB	1.47	5.04	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.366	5.04	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0673	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0344	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0372	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.170	5.04	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.0968	5.04	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0614	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0929	5.04	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0618	5.04	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0419	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0312	1.01	PQL	ng/Kg	
	OCDF	JB	0.979	10.1	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-514-SA7-SB-0.0-0.5	BERYLLIUM	J	0.476	1.01	PQL	mg/Kg	J (all detects)
	BORON	J	2.55	10.1	PQL	mg/Kg	
	CADMIUM	J	0.397	1.01	PQL	mg/Kg	
	TIN	J	2.78	10.1	PQL	mg/Kg	
SL-515-SA7-SB-0.0-0.5	BERYLLIUM	J	0.439	0.985	PQL	mg/Kg	J (all detects)
	BORON	J	1.67	9.85	PQL	mg/Kg	
	CADMIUM	J	0.404	0.985	PQL	mg/Kg	
	COPPER	J	8.75	9.85	PQL	mg/Kg	
	SODIUM	J	81.3	98.5	PQL	mg/Kg	
	TIN	J	2.96	9.85	PQL	mg/Kg	

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-514-SA7-SB-0.0-0.5	SELENIUM	J	0.120	0.404	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0339	0.202	PQL	mg/Kg	
SL-515-SA7-SB-0.0-0.5	SELENIUM	J	0.105	0.394	PQL	mg/Kg	J (all detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH049

Laboratory: LL

EDD Filename: PH049\_v1

eQAPP Name: CDM\_SSFL\_130705\_Lan

**Method:** 7471B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-515-SA7-SB-0.0-0.5	MERCURY	J	0.0112	0.0168	PQL	mg/Kg	J (all detects)

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-514-SA7-SB-0.0-0.5	CHRYSENE	J	5.1	17	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	6.8	17	PQL	ug/Kg	
SL-515-SA7-SB-0.0-0.5	CHRYSENE	J	0.34	1.7	PQL	ug/Kg	J (all detects)



## **Enclosure II**

### **Level IV Validation Reports**



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** June 6, 2013

**LDC Report Date:** July 29, 2013

**Matrix:** Soil

**Parameters:** Semivolatiles

**Validation Level:** Level IV

**Laboratory:** Eurofins

**Sample Delivery Group (SDG):** PH049

**Sample Identification**

SL-514-SA7-SB-0.0-0.5

SL-515-SA7-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 SW 846 Method 8270C-SIM for Semivolatiles.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. GC/MS Instrument Performance Check**

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

## **III. Initial Calibration**

Initial calibration was performed using required standard concentrations.

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

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

## **IV. Continuing Calibration**

Continuing calibration was performed at the required frequencies.

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

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

## **V. Blanks**

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

Samples EB1-060313 and EB2-060313 (both from SDG PH045) were identified as equipment blanks. No semivolatile contaminants were found with the following exceptions:



Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB1-060313	6/3/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate	0.16 ug/L 0.11 ug/L 0.16 ug/L	All samples in SDG PH049
EB2-060313	6/3/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate	0.12 ug/L 0.12 ug/L 0.12 ug/L	All samples in SDG PH049

Sample FB-041113 (from SDG PH029) was identified as a field blank. No semivolatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
FB-041113	4/11/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate 1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	0.17 ug/L 0.18 ug/L 0.082 ug/L 0.019 ug/L 0.024 ug/L 0.17 ug/L	All samples in SDG PH049

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

## VI. Surrogate Spikes

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

## VII. Matrix Spike/Matrix Spike Duplicates

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

## VIII. Laboratory Control Samples (LCS)

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

## IX. Regional Quality Assurance and Quality Control

Not applicable.



## **X. Internal Standards**

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

## **XI. Target Compound Identifications**

All target compound identifications were within validation criteria.

## **XII. Compound Quantitation**

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 PH049	All compounds reported below the RL.	J (all detects)	A

## **XIII. Tentatively Identified Compounds (TICs)**

Raw data were not reviewed for this SDG.

## **XIV. System Performance**

The system performance was acceptable.

## **XV. Overall Assessment**

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

## **XVI. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Semivolatiles - Data Qualification Summary - SDG PH049**

SDG	Sample	Compound	Flag	A or P	Reason
PH049	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Semivolatiles - Laboratory Blank Data Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Semivolatiles - Field Blank Data Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG



LDC #: 30022C2b **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH049

Level IV

Laboratory: Eurofins Lancaster Laboratories

SJOA

Date: 7/22/13

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

**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	Δ	Sampling dates: 6/6/13
II.	GC/MS Instrument performance check	Δ	
III.	Initial calibration	Δ	% RSD ≤ 30
IV.	Continuing calibration/ICV	Δ	ICV/CCV ≤ 25
V.	Blanks	Δ	
VI.	Surrogate spikes	Δ	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	Δ	LCs
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	Δ	
XI.	Target compound identification	Δ	
XII.	Compound quantitation/RL/LOQ/LODs	Δ	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	Δ	
XV.	Overall assessment of data	Δ	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	FB = EBI-060313 / SDG# PH049 EB2-060313

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:

S01L

FB = FB-041113

1	SL-514-SA7-SB-0.0-0.5	11	SBLKLP159	21		31	
2	SL-515-SA7-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	



**Method:** Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 12 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq 30\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



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



## VALIDATION FINDINGS WORKSHEET

**METHOD:** GC/MS SVOA

A. Phenol	T. 4-Chloroaniline	MM. 4-Chlorophenyl-phenyl ether	FFF. Di-n-octylphthalate	YYY. 2,3,5-Trimethylnaphthalene
B. Bis (2-chloroethyl) ether	U. Hexachlorobutadiene	NN. Fluorene	GGG. Benzo(b)fluoranthene	ZZZ. Perylene
C. 2-Chlorophenol	V. 4-Chloro-3-methylphenol	OO. 4-Nitroaniline	HHH. Benzo(k)fluoranthene	AAAA. Dibenzothiophene
D. 1,3-Dichlorobenzene	W. 2-Methylnaphthalene	PP. 4,6-Dinitro-2-methylphenol	III. Benzo(a)pyrene	BBBB. Benzo(a)fluoranthene
E. 1,4-Dichlorobenzene	X. Hexachlorocyclopentadiene	QQ. N-Nitrosodiphenylamine	JJJ. Indeno(1,2,3-cd)pyrene	CCCC. Benzo(b)fluorene
F. 1,2-Dichlorobenzene	Y. 2,4,6-Trichlorophenol	RR. 4-Bromophenyl-phenylether	KKK. Dibenzo(a,h)anthracene	DDDD. cis/trans-Decalin
G. 2-Methylphenol	Z. 2,4,5-Trichlorophenol	SS. Hexachlorobenzene	LLL. Benzo(g,h,i)perylene	EEEE. Biphenyl
H. 2,2'-Oxybis(1-chloropropane)	AA. 2-Chloronaphthalene	TT. Pentachlorophenol	MMM. Bis(2-Chloroisopropyl)ether	FFFF. Retene
I. 4-Methylphenol	BB. 2-Nitroaniline	UU. Phenanthrene	NNN. Aniline	GGGG. C30-Hopane
J. N-Nitroso-di-n-propylamine	CC. Dimethylphthalate	VV. Anthracene	OOO. N-Nitrosodimethylamine	HHHH. 1-Methylphenanthrene
K. Hexachloroethane	DD. Acenaphthylene	WW. Carbazole	PPP. Benzoic Acid	IIII. 1,4-Dioxane
L. Nitrobenzene	EE. 2,6-Dinitrotoluene	XX. Di-n-butylphthalate	QQQ. Benzyl alcohol	JJJJ. Acetophenone
M. Isophorone	FF. 3-Nitroaniline	YY. Fluoranthene	RRR. Pyridine	KKKK. Atrazine
N. 2-Nitrophenol	GG. Acenaphthene	ZZ. Pyrene	SSS. Benzidine	LLLL. Benzaldehyde
O. 2,4-Dimethylphenol	HH. 2,4-Dinitrophenol	AAA. Butylbenzylphthalate	TTT. 1-Methylnaphthalene	MMMM. Caprolactam
P. Bis(2-chloroethoxy)methane	II. 4-Nitrophenol	BBB. 3,3'-Dichlorobenzidine	UUU. Benzo(b)thiophene	NNNN.
Q. 2,4-Dichlorophenol	JJ. Dibenzofuran	CCC. Benzo(a)anthracene	VVV. Benzonaphthothiophene	OOOO.
R. 1,2,4-Trichlorobenzene	KK. 2,4-Dinitrotoluene	DDD. Chrysene	WWW. Benzo(e)pyrene	PPPP.
S. Naphthalene	LL. Diethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	XXX. 2,6-Dimethylnaphthalene	QQQQ.



LDC #: 30022026VALIDATION FINDINGS WORKSHEET  
Field BlanksPage: 1 of 1Reviewer: FT2nd Reviewer: [Signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L Associated sample units: ug/kgSampling date: 6/3/13Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All ND + > 10XEB<sub>1</sub> = EB1-060313

Compound	Blank ID	Sample Identification									
	<u>EB<sub>1</sub></u>										
<u>XX</u>	<u>0.16</u>										
<u>LL</u>	<u>0.11</u>										
<u>EE</u>	<u>0.16</u>										

Blank units: ug/L Associated sample units: ug/kgEB<sub>2</sub> = EB2-060313Sampling date: 6/3/13Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All ND + > 10X

Compound	Blank ID	Sample Identification									
	<u>EB<sub>2</sub></u>										
<u>XX</u>	<u>0.12</u>										
<u>LL</u>	<u>0.12</u>										
<u>EE</u>	<u>0.12</u>										

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

Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".



LDC #: 30022026VALIDATION FINDINGS WORKSHEET  
Field BlanksPage: 1 of 1Reviewer: FT2nd Reviewer: ↖

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were field blanks identified in this SDG?Y N N/A Were target compounds detected in the field blanks?Blank units: ug/L Associated sample units: FB ug/kgSampling date: 4/11/13Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: All (ND + 7/10X)FB = FB-041113  
SDG # PH029

Compound	Blank ID	Sample Identification							
	FB								
XX	0.17								
LL	0.18								
EEĒ	0.082								
TTT	0.019								
W	0.024								
S	0.17								

Blank units: \_\_\_\_\_ Associated sample units: \_\_\_\_\_

Sampling date: \_\_\_\_\_

Field blank type: (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ Associated Samples: \_\_\_\_\_

Compound	Blank ID	Sample Identification							

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

Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".



# VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

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

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

$A_x$  = Area of compound,

$C_x$  = Concentration of compound,

$S$  = Standard deviation of the RRFs,

$A_{is}$  = Area of associated internal standard

$C_{is}$  = Concentration of internal standard

$X$  = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF ( / std)	RRF ( / std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	1CAL	6/12/13	N-Nitrosodimethylamine (1st internal standard)	0.892	0.892	0.867	0.867	12	12
			Naphthalene (2nd internal standard)	1.106	1.106	1.149	1.149	7	7
			Acenaphthene (3rd internal standard)	1.059	1.059	1.061	1.061	4	4
			Fluoranthene (4th internal standard)	1.099	1.099	1.083	1.083	4	4
			Chrysene (5th internal standard)	1.314	1.314	1.338	1.338	3	3
			Benzo(a)pyrene (6th internal standard)	1.405	1.405	1.376	1.376	7	7
2									
3									

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 #: 30022 C26

# **VALIDATION FINDINGS WORKSHEET** **Continuing Calibration Results Verification**

Page: 1 of 1Reviewer: FT2nd Reviewer: A**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

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

% Difference =  $100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$ 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, $C_x$  = Concentration of compound, $A_{is}$  = Area of associated internal standard $C_{is}$  = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D <sup>F1</sup> % Drift	%D
1	FF0581	6/18/13	N-Nitrosodimethylamine (1st internal standard)	0.867	0.906	0.906	5	4.49
			Naphthalene (2nd internal standard)	1.149	1.104	1.104	4	3.9
			Acenaphthene (3rd internal standard)	1.061	1.056	1.056	0	0.47
			Fluoranthene (4th internal standard)	1.083	1.111	1.111	3	2.58
			Chrysene (5th internal standard)	1.338	1.312	1.312	2	1.9
			Benzo(a)pyrene (6th internal standard)	1.376	1.408	1.408	2	2.3
2			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
			(5th internal standard)					
			(6th internal standard)					
3								
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
			(5th internal standard)					
			(6th internal standard)					

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



Surrogate Results VerificationReviewer: FT2nd reviewer: A**METHOD:** GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: A1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
<del>Nitrobenzene-d5</del>	<del>Fluoranthene-d10</del> <sup>F1</sup> <del>0.1</del> <del>23333</del>	0.080	80	80	0
2-Fluorobiphenyl	<del>Benz(a)pyrene-d12</del>	0.083	83	83	↓
Terphenyl-d14	<del>1-Methylnaphthalene-d10</del> ↓	0.092	92	92	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: \_\_\_\_\_

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: \_\_\_\_\_

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					



Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: FT2nd Reviewer: SA**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

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

% Recovery =  $100 * (SC/SA)$ 

Where: SSC = Spike concentration

SA = Spike added

RPD =  $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$ 

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 159 LDCs

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	30.79	NA	92	92				
Pentachlorophenol										
Pyrene	33.33	NA	32.17	NA	97	97	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.







**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** June 6, 2013

**LDC Report Date:** July 29, 2013

**Matrix:** Soil

**Parameters:** Chlorinated Pesticides

**Validation Level:** Level IV

**Laboratory:** Eurofins

**Sample Delivery Group (SDG):** PH049

**Sample Identification**

SL-515-SA7-SB-0.0-0.5



## Introduction

This data review covers one soil sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. GC/ECD Instrument Performance Check**

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

## **III. Initial Calibration**

Initial calibration of single compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

## **IV. Continuing Calibration**

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0%.

## **V. Blanks**

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

Samples EB1-060313 and EB2-060313 (both from SDG PH045) were identified as equipment blanks. No chlorinated pesticide contaminants were found.

Sample FB-041113 (from SDG PH029) were identified a field blank. No chlorinated pesticide contaminants were found.



## VI. Surrogate Spikes

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

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
PBLK07162	Not specified	Decachlorobiphenyl	130 (20-120)	All TCL compounds	J (all detects)	P
SL-515-SA7-SB-0.0-0.5	Not specified	Decachlorobiphenyl	128 (20-120)	All TCL compounds	J (all detects)	P

## VII. Matrix Spike/Matrix Spike Duplicates

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

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS07162	gamma-BHC Heptachlor 4,4'-DDD Endosulfan II 4,4'-DDT Endrin ketone	136 (72-128) 128 (69-125) 142 (76-138) 137 (68-128) 134 (72-131) 138 (74-127)	All samples in SDG PH049	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P
LCS07162	beta-BHC	71 (76-123)	All samples in SDG PH049	J (all detects) UJ (all non-detects)	P

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

## XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.



## **XII. Target Compound Identification**

All target compound identifications were within validation criteria.

## **XIII. Compound Quantitation**

All compound quantitations were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
SL-515-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A

## **XIV. Overall Assessment of Data**

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

## **XV. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Data Qualification Summary - SDG PH049**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH049	SL-515-SA7-SB-0.0-0.5	All TCL compounds	J (all detects)	P	Surrogate Spike (%R) (S)
PH049	SL-515-SA7-SB-0.0-0.5	gamma-BHC Heptachlor 4,4'-DDD Endosulfan II 4,4'-DDT Endrin ketone	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control sample (%R) (L)
PH049	SL-515-SA7-SB-0.0-0.5	beta-BHC	J (all detects) UJ (all non-detects)	P	Laboratory control sample (%R) (L)
PH049	SL-515-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG



LDC #: 30022C3a **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH049

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 7/22/13

Page: 1 of 1

Reviewer: P1

2nd Reviewer: A

**METHOD:** GC Chlorinated Pesticides (EPA SW846 Method 8081A)

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

	Validation Area		Comments
I.	Technical holding times	$\Delta$	Sampling dates: 6/6/13
II.	GC/ECD Instrument Performance Check	$\Delta$	
III.	Initial calibration	$\Delta$	% PSD $\leq 20$
IV.	Continuing calibration/ICV	A	ICV/CCV $\leq 20$
V.	Blanks	$\Delta$	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	SW	LCs
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	$\Delta$	
XIV.	Overall assessment of data	$\Delta$	
XV.	Field duplicates	N	
XVI.	Field blanks	ND	EB = FB1-060313 > SDG# PH045 EB2-060313

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:

5012

FB = FB-041113 SDG# PH029

1	SL-515-SA7-SB-0.0-0.5	11	PBLK07162	21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:



**Method:** Pesticides/PCBs (EPA SW 846 Method 8081A/8082)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. GC/ECD Instrument performance check</b>				
Was the instrument performance found to be acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) $\leq 20\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the required standard concentrations analyzed in the initial calibration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
What type of continuing calibration calculation was performed? ____%D or ____%R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were endrin and 4,4'-DDT breakdowns $\leq 15\%$ for individual breakdown in the Evaluation mix standards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 20\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were extract cleanup blanks analyzed with every batch requiring clean-up?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



LDC #: 30022C3a

## VALIDATION FINDINGS CHECKLIST

Page: 2 of 2  
Reviewer: P7  
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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?	/		/	
<b>VIII. Laboratory control samples</b>				
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?		/		
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>X. Target compound identification</b>				
Were the retention times of reported detects within the RT windows?	/			
<b>XI. Compound quantitation/CRQLs</b>				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	/			
<b>XII. System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target compounds were detected in the field blanks.		/		



# VALIDATION FINDINGS WORKSHEET

**METHOD:** Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



LDC #: 30022C3a

## VALIDATION FINDINGS WORKSHEET

### Surrogate Recovery

Page:      of     

Reviewer: FT\_\_\_\_\_

2nd Reviewer: DA

METHOD: GC HPLC

Are surrogates required by the method? Yes\_\_\_\_ or No\_\_\_\_.

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

Y 2 N N/A Were surrogates spiked into all samples and blanks?

Y/N/N/A	Did all surrogate recoveries (%R) meet the QC limits?
---------	---

[illegible]

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Triphenyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		



LDC #: 30022C3a

## VALIDATION FINDINGS WORKSHEET

### Laboratory Control Samples (LCS)

Page:      of     

Reviewer: F7

2nd Reviewer: DA

METHOD: GC HPLC

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

N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

**Level IV/D Only**

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

[illegible]



LDC #: 30022C32

# **VALIDATION FINDINGS WORKSHEET** **Initial Calibration Calculation Verification**

Page: 1 of 1  
 Reviewer: F7  
 2nd Reviewer: R

METHOD: GC        HPLC       

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C

Average CF = sum of the CF/number of standards

%RSD = 100 \* (S/X)

Where: A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF (10/100 std)	CF (10/100 std)	CF (initial)	CF (initial)	%RSD	%RSD
1	ICAL	6/14/13	endosulfan/	95844.48	95844.48	100511.7	100511.7	8.555	8.555
	RTX CLP1		methoxychlor	15073.14	15073.14	14361.83	14361.83	5.056	5.056
	RTX CLP2		↓	231644.1	231644.1	248988.7	248988.7	11.405	11.405
				31967.91	31967.91	31320.61	31320.61	1.243	1.243
2									
3									
4									

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



LDC #: 30022C3a

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Results Verification**

Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: [Signature]

METHOD: GC        HPLC       

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

$$\% \text{ Difference} = 100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$$

Where: ave. CF = initial calibration average CF  
CF = continuing calibration CF  
A = Area of compound  
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(lcal)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/ Conc. CCV	CF/ Conc. CCV	%D	%D
1			<i>Analyzed after 102</i>					
2								
3								
4								

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



LDC #: 30022C3a**VALIDATION FINDINGS WORKSHEET**  
**Surrogate Results Verification**Page: 1 of 1Reviewer: F72nd reviewer: SA**METHOD: GC Pesticides (EPA SW 846 Method 8081)**

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
DCB	RTX CUP1	10.20	13.02015	128	128	0
TCMX	↓	10.1	10.23856	102	102	0

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 30022C39

## VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationPage: 1 of 1  
Reviewer: F7  
2nd Reviewer: Q

METHOD: GC Pesticides (EPA SW 846 method 8081)

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

 $\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$ 

Where

SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

 $\text{RPD} = ((\text{SSCLCS} - \text{SSCLCSD}) * 2) / (\text{SSCLCS} + \text{SSCLCSD}) * 100$ 

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: \_\_\_\_\_

Compound	Spike Added ( ug/kg )		Sample Conc. ( ug/kg )	Spike Sample Concentration ( ug/kg )		LCS		LCSD		LCS/LCSD	
						Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD		---	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported
Gamma-BHC	3.41	NA	ND	4.64	NA	136	136				
4,4'-DDT	7.14	↓	↓	9.54	↓	134	134	NA			
							</				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 30022032**VALIDATION FINDINGS WORKSHEET**  
**Sample Calculation Verification**Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: SA**METHOD:** GC Pesticides (EPA SW 846 Method 8081)C  
Y N N/A  
Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration=  $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$ 

Example:

Sample ID. 125 Compound Name endosulfan 1Concentration =  $\frac{1200405 (10)}{100511.7 (30)}$  $= 3.98 \text{ ug / kg}$ 

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: \_\_\_\_\_



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** June 6, 2013

**LDC Report Date:** July 29, 2013

**Matrix:** Soil

**Parameters:** Polychlorinated Biphenyls

**Validation Level:** Level IV

**Laboratory:** Eurofins

**Sample Delivery Group (SDG):** PH049

**Sample Identification**

SL-514-SA7-SB-0.0-0.5

SL-515-SA7-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 SW 846 Method 8082A for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory, Area IV, Site SA7 (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. GC/ECD Instrument Performance Check**

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

## **III. Initial Calibration**

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

## **IV. Continuing Calibration**

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

## **V. Blanks**

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Samples EB1-060313 and EB2-060313 (both from SDG PH045) were identified as equipment blanks. No polychlorinated biphenyl contaminants were found.

Sample FB-041113 (from SDG PH029) was identified a field blank. No polychlorinated biphenyl contaminants were found.



## VI. Surrogate Spikes

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

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
PBLK08162	ZBmultiR1	Decachlorobiphenyl	122 (45-120)	All TCL compounds	J (all detects)	P

## VII. Matrix Spike/Matrix Spike Duplicates

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

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

## XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

## XII. Target Compound Identification

All target compound identifications were within validation criteria.

## XIII. Compound Quantitation

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 PH049	All compounds reported below the RL.	J (all detects)	A



#### **XIV. Overall Assessment of Data**

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

#### **XV. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Data Qualification Summary - SDG PH049**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH049	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG



**METHOD:** GC Polychlorinated Biphenyls (EPA SW 846 Method 8082A)

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	Δ	Sampling dates: 6/6/13
II.	GC/ECD Instrument Performance Check	Δ	
III.	Initial calibration	Δ	% RSD ≤ 20
IV.	Continuing calibration/ICV	A	100/100 ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	Δ	res ID
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	Δ	
XIII.	Compound quantitation/RL/LOQ/LODs	Δ	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	ND	EB = EB1-060313 > SDG # = EB2-060313 PH045

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

FB = FB-041113 > SDG # PH029

1	SL-514-SA7-SB-0.0-0.5	11	PBLK 08162	21		31	
2	SL-515-SA7-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 #: 3002205

## VALIDATION FINDINGS CHECKLIST

Page: 1 of 2  
Reviewer: FT  
2nd Reviewer: AMethod: ☒ GC ☐ HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq 20\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $< 20\%$ or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



LDC #: 30022036

## VALIDATION FINDINGS CHECKLIST

Page: 2 of 2  
Reviewer: FT  
2nd Reviewer: AS

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XII. System performance				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field duplicates.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
XV. Field blanks				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Target compounds were detected in the field blanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	



LDC #: 30022C36

## VALIDATION FINDINGS WORKSHEET

### Surrogate Recovery

Page: 7 of 7

Reviewer: FT

2nd Reviewer: SA

METHOD: ☒ GC ☐ HPLC

Are surrogates required by the method? Yes\_\_\_\_ or No\_\_\_\_.

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

Y/N N/A Were surrogates spiked into all samples and blanks?

Y(N N/A	Did all surrogate recoveries (%R) meet the QC limits?

[illegible]

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Triphenyltin		
D	Bromochlorobenzene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		



LDC #: 30022c36

# **VALIDATION FINDINGS WORKSHEET** **Initial Calibration Calculation Verification**

Page: 1 of 1  
 Reviewer: F7  
 2nd Reviewer: ↶

METHOD: GC ✓ HPLC       

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C

Average CF = sum of the CF/number of standards

%RSD = 100 \* (S/X)

Where: A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF ( 200std)	CF ( 200std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	KA2	6/9/13	Aroclor 1260-1	14355	14355	14384	14384	13	13
	ZB muH R1								
	ZB muH R2		L	30151	30151	30763	30763	12	12
2									
3									
4									

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



LDC #: 30022C36

# **VALIDATION FINDINGS WORKSHEET** **Continuing Calibration Results Verification**

Page: 1 of 1  
 Reviewer: F7  
 2nd Reviewer: EA

METHOD: GC ✓ HPLC       

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

$$\% \text{ Difference} = 100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$$

Where: ave. CF = initial calibration average CF  
 CF = continuing calibration CF  
 A = Area of compound  
 C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/ Conc. CCV	CF/ Conc. CCV	%D	%D
1	<u>CCV 69.25</u> <u>2Bmulti R2</u> <u>R1</u>	<u>6/12/13</u>	<u>Aroclor 1260</u>	<u>200.0</u>	<u>188.30</u>	<u>188.30</u>	<u>6</u>	<u>6</u>
				<u>200.0</u>	<u>199.72</u>	<u>199.72</u>	<u>0</u>	<u>0</u>
2	<u>CCV 11.52</u> <u>2Bmulti R1</u> <u>R2</u>	<u>6/12/13</u>	<u>↓</u>	<u>200.0</u>	<u>200.26</u>	<u>200.24</u>	<u>0</u>	<u>0</u>
				<u>200.0</u>	<u>201.33</u>	<u>201.33</u>	<u>1</u>	<u>1</u>
3								
4								

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



LDC #: 30022C34VALIDATION FINDINGS WORKSHEET  
Surrogate Results VerificationPage: 1 of 1Reviewer: F72nd reviewer: ↩METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery:  $SF/SS * 100$ Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TCMX	ZB-1	10.1	10.63	106	106	0
PCB	↓	10.2	10.5662	104	104	0

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 30022C3h

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: PJ2nd Reviewer: EAMETHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery =  $100 * (SSC - SC) / SA$ 

Where SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

RPD =  $\frac{((SSCLCS - SSCLCSD) * 2)}{(SSCLCS + SSCLCSD)} * 100$ 

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: was 10 08162

Compound	Spike Added ( <u>ug/kg</u> )		Sample Conc. ( <u>ug/kg</u> )	Spike Sample Concentration ( <u>ug/kg</u> )		LCS		LCSD		LCS/LCSD	
						Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD		---	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB 1260	167	NA	ND	171.73	NA	103	103	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 30022236VALIDATION FINDINGS WORKSHEET  
Sample Calculation VerificationPage: 1 of 1Reviewer: F72nd Reviewer: ↩METHOD: ✓ GC    HPLCY N N/A  
Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration=  $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$ 

Example:

Sample ID: #1 Compound Name Aroclor 1254final  
Concentration = 51.6930.989= 52

A= Area or height of the compound to be measured

Fv= Final Volume of extract

Df= Dilution Factor

RF= Average response factor of the compound  
In the initial calibration

Vs= Initial volume of the sample

Ws= Initial weight of the sample

%S= Percent Solid

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	<u>1254-1 = 50.253</u>			<u>1524965.875 (10) =</u>	<u>50.253776</u>
	<u>-2 = 45.878</u>			<u>10115 (30)</u>	
	<u>-3 = 50.321</u>				
	<u>-4 = 36.1923</u>				
	<u>-5 = 53.903</u>				
	<u>-6 = 73.5231</u>				
	<u>Ave = 51.693</u>				

Comments: \_\_\_\_\_



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** June 6, 2013

**LDC Report Date:** July 24, 2013

**Matrix:** Soil

**Parameters:** Metals

**Validation Level:** Level IV

**Laboratory:** Eurofins Lancaster Laboratories

**Sample Delivery Group (SDG):** PH049

**Sample Identification**

SL-514-SA7-SB-0.0-0.5

SL-515-SA7-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 SW 846 Methods 6020A, 6010C, and 7471B for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## I. Technical Holding Times

All technical holding time requirements were met.

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

## II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

## III. Calibration

The initial and continuing calibrations were performed at the required frequency.

The calibration standards criteria were met.

## IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Calcium Iron Phosphorus Tin	6.150 mg/Kg 4.388 mg/Kg 1.166 mg/Kg 1.434 mg/Kg	All samples in SDG PH049
ICB/CCB	Aluminum Arsenic Barium Iron Molybdenum Manganese Phosphorus Titanium Thallium	41.3 ug/L 3.4 ug/L 0.50 ug/L 132 ug/L 3.7 ug/L 2.1 ug/L 4.3 ug/L 8.6 ug/L 0.19 ug/L	All samples in SDG PH049

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:



Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-514-SA7-SB-0.0-0.5	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-515-SA7-SB-0.0-0.5	Tin	3.0 mg/Kg	3.0U mg/Kg

Sample EB2-060313 (from SDG PH045) was identified as an equipment blank. No metal contaminants were found.

Sample FB-041113 (from SDG PH029) was identified as a field blank. No metal contaminants were found with the following exceptions:

Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
FB-041113	4/11/13	Copper Molybdenum	0.0036 mg/L 0.0036 mg/L	All samples in SDG PH049

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

## V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

## VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-524-SA7-SB-1.0-2.0MS/MSD (All samples in SDG PH049)	Phosphorus Potassium	156 (75-125) 138 (75-125)	- -	- -	J (all detects) J (all detects)	A

## VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:



DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-524-SA7-SB-1.0-2.0DUP (All samples in SDG PH049)	Calcium Nickel Strontium	42 ( $\leq 20$ ) 27 ( $\leq 20$ ) 31 ( $\leq 20$ )	- - -	J (all detects) UJ (all non-detects)	A

### VIII. Laboratory Control Samples (LCS)

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

### IX. Internal Standards

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

### X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

### XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-524-SA7-SB-1.0-2.0	Iron	11 ( $\leq 10$ )	All samples in SDG PH049	J (all detects) UJ (all non-detects)	A

### XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG PH049	All analytes reported below the RL and above the MDL.	J (all detects)	A

### XIII. Overall Assessment of Data

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



#### **XIV. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Metals - Data Qualification Summary - SDG PH049**

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
PH049	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-SB-0.0-0.5	Phosphorus Potassium	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH049	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-SB-0.0-0.5	Calcium Nickel Strontium	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
PH049	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-SB-0.0-0.5	Iron	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
PH049	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-SB-0.0-0.5	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

**Santa Susana Field Laboratory**  
**Metals - Laboratory Blank Data Qualification Summary - SDG PH049**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH049	SL-514-SA7-SB-0.0-0.5	Tin	2.8U mg/Kg	A	B
PH049	SL-515-SA7-SB-0.0-0.5	Tin	3.0U mg/Kg	A	B

**Santa Susana Field Laboratory**  
**Metals - Field Blank Data Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG



LDC #: 30022C4

**VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH049

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 7/24/13

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

**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	A	Sampling dates: 6/6/13
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	A	
VI.	Matrix Spike Analysis	SW	MS/D (PH046)
VII.	Duplicate Sample Analysis	SW	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV.	Field Blanks	SW	EB = EB2-060313 (PH045)

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

FB = FB-041113 (PH029)

Validated Samples:

501

1	SL-514-SA7-SB-0.0-0.5	11		21		31	
2	SL-515-SA7-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: \_\_\_\_\_



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

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. ICP/MS Tune</b>				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were %RSD of isotopes in the tuning solution $\leq 5\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the proper number of standards used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all initial calibration correlation coefficients $\geq 0.995$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. ICP Interference Check Sample</b>				
Were ICP interference check samples performed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\pm RL$ ( $\pm 2X RL$ for soil) was used for samples that were $\leq 5X$ the RL, including when only one of the duplicate sample values were $\leq 5X$ the RL.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Validation Area	Yes	No	NA	Findings/Comments
<b>VIII. Furnace Atomic Absorption QC</b>				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analyses have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
<b>IX. ICP Serial Dilution</b>				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL (ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
<b>X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)</b>				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
<b>XI. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
<b>XII. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	✓			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	✓			
Target analytes were detected in the field blanks.	✓			



All circled elements are applicable to each sample.

[illegible]


Comments: Mercury by CVAA if performed



LDC #: 30022C4

**VALIDATION FINDINGS WORKSHEET**  
**PB/ICB/CCB QUALIFIED SAMPLES**

Page: 1 of 1

Reviewer: 2nd Reviewer: 

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

Soil preparation factor applied: 100x

Sample Concentration units, unless otherwise noted: mg/Kg

Associated Samples: All Reason: B

Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/L)	Maximum ICB/CCB <sup>a</sup> (ug/L)	Action Level	1	2							
Al			41.3	20.65									
As			3.4	1.7									
Ba			0.50	0.25									
Ca	6.150			30.75									
Fe	4.388		132	66									
Mo			3.7	1.85									
Mn			2.1	1.05									
P	1.166		4.3	5.83									
Sn	1.434			7.17	2.8	3.0							
Ti			8.6	4.3									
Tl			0.19	0.095									

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 #: 30022C4

**VALIDATION FINDINGS WORKSHEET**  
**Field Blanks**

Page: 1 of 1  
Reviewer: 02  
2nd Reviewer: LN

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

**Blank units:** mg/L **Associated sample units:** mg/Kg Reason: F

**Sampling date:** 4/11/13 Soil factor applied 100x

**Field blank type:** (circle one) Field Blank / Rinsate / Other:                      Associated Samples: All

Analyte	Blank ID	Sample Identification										
	FB-041113 (SDG: PH029)	Action Limit	No Qualifiers									
Cu	0.0036	1.8										
Mo	0.0036	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 #: 30022C4

## VALIDATION FINDINGS WORKSHEET

### Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1

Reviewer: 9

2nd Reviewer: 

**METHOD:** <sup>metals</sup> Inorganics, EPA Method

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

(Y) N	N/A	Was a matrix spike analyzed for each matrix in this SDG?
-------	-----	--

Y(N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD)  $\leq 20\%$  for water samples and  $\leq 35\%$  for soil samples?

**LEVEL IV ONLY:**

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments:







LDC #: 3002269

## VALIDATION FINDINGS WORKSHEET

### ICP Serial Dilution

Page: 1 of 1

Reviewer: OR

2nd Reviewer: [Signature]

**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

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

Y N N/A If analyte concentrations were > 50X the MDL (ICP), or >100X the MDL (ICP/MS), was a serial dilution analyzed?

Y/N N/A Were ICP serial dilution percent differences (%D)  $\leq 10\%$ ?

Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

**LEVEL IV ONLY:**

Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments:



LDC #: 3002209

# **VALIDATION FINDINGS WORKSHEET** **Initial and Continuing Calibration Calculation Verification**

Page: 1 of 1  
 Reviewer: GR  
 2nd Reviewer: W

**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution  
 True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated	Reported	Acceptable (Y/N)
					%R	%R	
ICV	ICP (Initial calibration)	Pb	594.41	600	99.1	99.1	Y
↓	ICP/MS (Initial calibration)	Ag	52.25	50	104.5	104.5	
↓	CVAA (Initial calibration)	Hg	2.37	2.5	94.8	94.8	
CCV (22/3)	ICP (Continuing calibration)	P	515.08	500	103	103	
↓ (25/9)	ICP/MS (Continuing calibration)	Se	25.73	25	102.9	102.9	
↓ (20/1)	CVAA (Continuing calibration)	Hg	0.99	1	99	99	
	GFAA (Initial calibration)						
	GFAA (Continuing calibration)						

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



LDC #: 30022C4

# **VALIDATION FINDINGS WORKSHEET** **Level IV Recalculation Worksheet**

Page: 1 of 1  
 Reviewer: 92  
 2nd Reviewer: LA

**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).  
 True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration  
 D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (mg/L)  
 SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD / %D	%R / RPD / %D	
ICSA3	ICP interference check	Co	475.5	500	95.1	95.1	Y
LCS	Laboratory control sample	P1	195.9	200	98	98	Y
SL-524-SAB	Matrix spike SB-1.0-2.0	Sh	(SSR-SR) 37.2298	48.0769	77	77	Y
↓	Duplicate	Mn	259.2260	275.4308	6	6	Y
↓	ICP serial dilution	V	316.17	307.05	3	3	Y

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



LDC #: 3002204**VALIDATION FINDINGS WORKSHEET**  
**Sample Calculation Verification**Page: 1 of 1Reviewer: OR2nd reviewer: W**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

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

☒ Y ☐ N ☐ N/A

Have results been reported and calculated correctly?

☒ Y ☐ N ☐ N/A

Are results within the calibrated range of the instruments and within the linear range of the ICP?

☒ Y ☐ N ☐ N/A

Are all detection limits below the CRDL?

Detected analyte results for Co were recalculated and verified using the following equation:Concentration =  $\frac{(RD)(FV)(Dil)}{(In. Vol.)}$ 

Recalculation:

RD = Raw data concentration  
FV = Final volume (ml)  
In. Vol. = Initial volume (ml) or weight (G)  
Dil = Dilution factor

$$\frac{100\text{ mL} (0.06135\text{ mg/L})}{0.989(\text{Clg})} = 6.20\text{ mg/kg}$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	13700	13700	Y
		As	4.7	4.7	
		Ba	70.9	70.9	
		Be	0.48	0.48	
		B	2.5	2.5	
		Cd	0.40	0.40	
		Ca	3260	3260	
		Cr	17.4	17.4	
		Co	6.2	6.2	
		Cu	11.7	11.7	
		Fe	23600	23600	
		Pb	10.5	10.5	
		Li	22.9	22.9	
		Mg	4930	4930	
		Mn	253	253	
		Hg	0.026	0.026	
		Ni	8.4	8.4	
		P	417	417	
		K	2600	2600	
		Se	0.12	0.12	

Note:

Ag	0.034	0.034
Na	111	111
Sr	15.7	15.7
Tl	0.22	0.22
Sn	2.8	2.8
Ti	1190	1190
V	38.3	38.3
Zn	61.7	61.7



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** June 6, 2013  
**LDC Report Date:** July 23, 2013  
**Matrix:** Soil  
**Parameters:** Total Petroleum Hydrocarbons as Extractables  
**Validation Level:** Level IV  
**Laboratory:** Eurofins  
**Sample Delivery Group (SDG):** PH049

**Sample Identification**

SL-514-SA7-SB-0.0-0.5  
SL-515-SA7-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 SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

## **III. Calibration Verification**

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractables contaminants were found in the method blanks.

Samples EB1-060313 and EB2-060313 (both from SDG PH045) were identified as equipment blanks. No total petroleum hydrocarbons as extractables contaminants were found.

Sample FB-041113 (from SDG PH029) was identified as a field blank. No total petroleum hydrocarbons as extractables contaminants were found.

## **V. Surrogate Recovery**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

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

## **VII. Laboratory Control Samples**

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



## **VIII. Target Compound Identification**

All target compound identifications were within validation criteria.

## **IX. 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 PH049	All compounds reported below the RL.	J (all detects)	A

## **X. System Performance**

The system performance was acceptable.

## **XI. Overall Assessment of Data**

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

## **XII. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -**  
**SDG PH049**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH049	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data**  
**Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification**  
**Summary - SDG PH049**

No Sample Data Qualified in this SDG



LDC #: 30022C8

**VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH049

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 7/22/13

Page: 1 of 1

Reviewer: FJ

2nd Reviewer: CA

**METHOD:** GC TPH as Extractables (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	Δ	Sampling dates: 6/06/13
II.	Initial calibration	Δ	
III.	Calibration verification/ICV	Δ	
IV.	Blanks	Δ	
V.	Surrogate recovery	Δ	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	Δ	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	NP	EB = EB1 - 060313 7 SDG # PH045 = EB2 - 060313

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

FB = FB - 041113 (SDG # PH029)

1	SL-514-SA7-SB-0.0-0.5	11	PBLK03161	21		31	
2	SL-515-SA7-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:



Method: ☒ GC ☐ HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq$ 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $> 0.990$ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq$ 20%.0 or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



LDC #: 3002208

## VALIDATION FINDINGS CHECKLIST

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

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓	✓	
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		



LDC #: 30022C8

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 1  
Reviewer: F7  
2nd Reviewer: ✓

METHOD: GC ✓ HPLC       

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C

Average CF = sum of the CF/number of standards

%RSD = 100 \* (S/X)

Where: A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				CF ( <del>288</del> std)	CF <del>288</del> std)	Ave CF (initial)	Ave CF (initial)	%RSD	%RSD
1	1CAL	5/6/20	TPH Ave RF	21868.1	21868.1	22209.38	22209.38	1.865	1.865
2									
3									
4									

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



LDC #: 3002828

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Results Verification**

Page: 1 of 1  
Reviewer: FJ  
2nd Reviewer: CA

METHOD: GC        HPLC       

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

$$\% \text{ Difference} = 100 * (\text{ave. CF} - \text{CF}) / \text{ave. CF}$$

Where: ave. CF = initial calibration average CF  
CF = continuing calibration CF  
A = Area of compound  
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported	Recalculated	Reported	Recalculated
					CF/ Conc. CCV	CF/ Conc. CCV	%D	%D
1	J162-0094	6/12/13	C <sub>8</sub> -C <sub>40</sub>	288.01	291.89	291.89	1	1
2	J162-0072	6/12/13	↓	239.97	259.46	259.46	8	8
3								
4								

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



LDC #: 3002208VALIDATION FINDINGS WORKSHEET  
Surrogate Results VerificationPage: 1 of 1Reviewer: F72nd reviewer: QMETHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery:  $SF/SS * 100$ Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Chlorobenzene	F7 H-5 ZB-5	2.0	1.6679	83	83	0
o-terphenyl	↓	↓	1.7084	85	85	0

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 3002208

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: FD2nd Reviewer: LDMETHOD: GC HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery =  $100 * (SSC - SC) / SA$ 

Where SSC = Spiked sample concentration

SC = Sample concentration

RPD =  $((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD) * 100$ 

SA = Spike added

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCSD3161

Compound	Spike Added ( mg/kg )		Sample Conc. ( mg/kg )	Spike Sample Concentration ( mg/kg )		LCS		LCSD		LCS/LCSD	
						Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	---	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EFH C30- C40	5.01	NA	NA	5.19	NA	104	104	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 3002208VALIDATION FINDINGS WORKSHEET  
Sample Calculation VerificationPage: 1 of 1  
Reviewer: F7  
2nd Reviewer: [Signature]METHOD: ☒ GC ☐ HPLCY N N/A  
Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration=  $\frac{(A)(F_v)(D_f)}{(RF)(V_s \text{ or } W_s)(\%S/100)}$ 

Example:

Sample ID. #1 Compound Name C21-C30A= Area or height of the compound to be measured  
Fv= Final Volume of extract  
Df= Dilution Factor  
RF= Average response factor of the compound  
In the initial calibration  
Vs= Initial volume of the sample  
Ws= Initial weight of the sample  
%S= Percent SolidConcentration =  $\frac{15016481 (1ml) (2)}{22209 (30g) (0.981)}$  $= 46 mg/kg$ 

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: \_\_\_\_\_



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** June 6, 2013

**LDC Report Date:** July 29, 2013

**Matrix:** Soil

**Parameters:** Dioxins/Dibenzofurans

**Validation Level:** Level IV

**Laboratory:** Eurofins

**Sample Delivery Group (SDG):** PH049

**Sample Identification**

SL-514-SA7-SB-0.0-0.5

SL-515-SA7-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 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
13165001	6/14/13	1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 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	0.0542 ng/Kg 0.0389 ng/Kg 0.0490 ng/Kg 0.0445 ng/Kg 0.385 ng/Kg 0.0711 ng/Kg 0.0370 ng/Kg 0.0411 ng/Kg 0.0374 ng/Kg 0.0753 ng/Kg 0.0261 ng/Kg 0.0586 ng/Kg 0.0448 ng/Kg 0.124 ng/Kg	All samples in SDG PH049

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-515-SA7-SB-0.0-0.5	1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.170 ng/Kg 0.0968 ng/Kg 0.0929 ng/Kg 0.0618 ng/Kg 0.0372 ng/Kg 0.0614 ng/Kg 0.0673 ng/Kg	0.170U ng/Kg 0.0968U ng/Kg 0.0929U ng/Kg 0.0618U ng/Kg 0.0372U ng/Kg 0.0614U ng/Kg 0.0673U ng/Kg

Sample EB2-060313 (from SDG PH045) 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
EB2-060313	6/3/13	1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 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	0.162 pg/L 0.372 pg/L 0.871 pg/L 0.405 pg/L 0.250 pg/L 0.300 pg/L 0.137 pg/L 0.195 pg/L 0.129 pg/L 0.275 pg/L 0.202 pg/L 0.688 pg/L	All samples in SDG PH049

Sample FB-041113 (from SDG PH029) 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-041113	4/11/13	1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF OCDF	0.125 pg/L 0.134 pg/L 0.402 pg/L 0.398 pg/L 0.316 pg/L 0.324 pg/L 0.221 pg/L 0.211 pg/L 0.149 pg/L 0.254 pg/L 0.840 pg/L	All samples in SDG PH049

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 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.

The 2,3,7,8-TCDF confirmation was performed with the following exceptions:



Sample	Compound	Finding	Criteria	Flag	A or P
SL-515-SA7-SB-0.0-0.5	2,3,7,8-TCDF	2nd column confirmation was not performed for this compound.	2,3,7,8-TCDF 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 PH049	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 PH049**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH049	SL-515-SA7-SB-0.0-0.5	2,3,7,8-TCDF	None	P	Compound quantitation (no 2nd column) (Z)
PH049	SL-514-SA7-SB-0.0-0.5 SL-515-SA7-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 PH049**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH049	SL-515-SA7-SB-0.0-0.5	1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.170U ng/Kg 0.0968U ng/Kg 0.0929U ng/Kg 0.0618U ng/Kg 0.0372U ng/Kg 0.0614U ng/Kg 0.0673U ng/Kg	A	B

**Santa Susana Field Laboratory**  
**Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG PH049**

No Sample Data Qualified in this SDG



LDC #: 30022C21

**VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH049

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 7-16-13

Page: 1 of 1

Reviewer: *CPM*2nd Reviewer: *CPM***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: 6/6/13
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	OPR
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	EB = EB2 - 060313 (PH045)

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

FB = FB = 041113 (PH029)

Validated Samples:

Soil

1	SL-514-SA7-SB-0.0-0.5	11		21		31	
2	SL-515-SA7-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	13115001	30		40	

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



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

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
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 $\leq 25\%$ ?	/			
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?	/			
<b>III. Initial calibration</b>				
Was the initial calibration performed at 5 concentration levels?	/			
Were all percent relative standard deviations (%RSD) $\leq 20\%$ for unlabeled compounds and $\leq 35\%$ for labeled compounds?	/			
Did all calibration standards meet the Ion Abundance Ratio criteria?	/			
Was the signal to noise ratio for each target compound $\geq 2.5$ and for each recovery and internal standard $> 10$ ?	/			
<b>IV. Continuing calibration</b>				
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?	/			
<b>V. Blanks</b>				
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?	/			
<b>VI. Matrix spike/Matrix spike duplicates</b>				
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?			/	
<b>VII. Laboratory control samples</b>				
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 FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
<b>VIII. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/	/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>IX. Internal standards</b>				
Were internal standard recoveries within the 25-150% criteria?	/			
Was the minimum S/N ratio of all internal standard peaks $\geq 10$ ?	/			
<b>X. Target compound identification</b>				
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 $\geq 2.5$ ?	/			
Does the maximum intensity of each specified characteristic ion coincide within $\pm 2$ seconds (includes labeled standards)?	/			
For PCDF identification, was any signal ( $S/N \geq 2.5$ , at $\pm$ seconds RT) detected in the corresponding PCDPE channel?	/	/		
Was an acceptable lock mass recorded and monitored?	/			
<b>XI. Compound quantitation/CRQLs</b>				
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?	/			
<b>XII. System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
<b>XV. Field blanks</b>				
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: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



## VALIDATION FINDINGS WORKSHEET

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

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

☒ Y ☐ N ☐ N/A Were all samples associated with a method blank?☒ Y ☐ N ☐ N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?☒ Y ☐ N ☐ N/A Was the method blank contaminated?

Blank extraction date: 06/14/13 Blank analysis date: 06/18/13

Associated samples: All Qual U (B)

Conc. units: ng/kg

Compound	Blank ID	Sample Identification							
	13165001	5X	2						
B	0.0542*	0.271							
D	0.0389*	0.195	0.170						
E	0.0490*	0.245	0.0968						
F	0.0445*	0.223							
G	0.385	1.93							
I	0.0711*	0.356	0.0929*						
J	0.0370	0.185	0.0618*						
K	0.0411*	0.206	0.0372*						
L	0.0374*	0.187							
M	0.0753*	0.377							
N	0.0261*	0.131	0.0614*						
O	0.0586*	0.293							
P	0.0448*	0.224	0.0673						
Q	0.124	0.62							

\*EMPC

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".



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: pg/L Associated sample units: ng/kg

Sampling date: 06/03/13

Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All &gt;5x

Compound	Blank ID	Sample Identification								
	EB2-060313	5X								
E	0.162*	0.810								
F	0.372*	1.86								
G	0.871	4.36								
I	0.405*	2.03								
J	0.250*	1.25								
K	0.300*	1.50								
L	0.137	0.685								
M	0.195*	0.975								
N	0.129*	0.645								
O	0.275*	1.38								
P	0.202	1.01								
Q	0.688	3.44								

\* EMPC

EB2-060313 (PH045)

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:  
All contaminants within five times the blank concentration were qualified as not detected, "U".

V:\Field Blanks\30022C21\_EB.wpd



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: pg/L Associated sample units: ng/kg

Sampling date: 04/11/13

Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: All &gt;5x

Compound	Blank ID	Sample Identification								
	FB-041113	5X								
C	0.125	0.625								
E	0.134*	0.67								
F	0.402*	2.01								
I	0.398*	1.99								
J	0.316*	1.58								
K	0.324	1.62								
L	0.221	1.105								
N	0.211*	1.055								
M	0.149	0.745								
O	0.254*	1.27								
Q	0.840*	4.2								

\* EMPC

FB-041113 (PH029)

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:  
All contaminants within five times the blank concentration were qualified as not detected, "U".



**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).

[illegible]

Comments: See sample calculation verification worksheet for recalculations



# VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

## 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	Recalculated	Reported	Recalculated	Reported	Recalculated
				Average RRF (initial)	Average RRF (initial)	RRF (CS3 std)	RRF (CS3 std)	%RSD	%RSD
1	ICAL DB5MS	3-22-13	2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)	1.043	1.043	1.025	1.024	5.23	5.24
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)	1.207	1.207	1.182	1.182	9.04	9.04
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)	0.957	0.9575	0.947	0.947	2.62	2.62
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8,-HpCDD)	1.048	1.048	1.028	1.028	3.46	3.47
			OCDF ( <sup>13</sup> C-OCDF)	0.933	0.933	0.920	0.920	5.76	5.76
2	ICAL SP2331	3-22-13	2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)	0.968	0.968	0.993	0.993	3.96	3.94
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8,-HpCDD)						
			OCDF ( <sup>13</sup> C-OCDF)						
3			2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8,-HpCDD)						
			OCDF ( <sup>13</sup> C-OCDF)						

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



# VALIDATION FINDINGS WORKSHEET Routine Calibration Results Verification

## 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:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

$A_x$  = Area of compound,

$C_x$  = Concentration of compound,

$A_{is}$  = Area of associated internal standard

$C_{is}$  = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Spiked Conc (ng/mL)	Reported	Recalculated	Reported	Recalculated
					Conc (ng/mL)	Conc (ng/mL)	%R	%R
1	CS3CC02	6-18-13	2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10	10.22	10.21	102	102
	DB5MS		2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10	9.93	9.93	99	99
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50	54.860	54.88	110	110
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50	53.460	53.45	107	107
			OCDF ( $^{13}\text{C}$ -OCDF)	100	109.52	109.52	110	110
2	CS3CC02	6-20-13	2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10	10.90	10.89	109	109
	SP2331		2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10				
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50				
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50				
			OCDF ( $^{13}\text{C}$ -OCDF)	100				
3			2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10				
			2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10				
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50				
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50				
			OCDF ( $^{13}\text{C}$ -OCDF)	100				

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 #: 30021521

# **VALIDATION FINDINGS WORKSHEET** **Laboratory Control Sample Results Verification**

Page: 1 of 1  
 Reviewer: Am  
 2nd Reviewer:   

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

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory 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 = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS ID: OPR 165001

Compound	Spike Added (ng/Kg)		Spiked Sample Concentration (ng/Kg)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
2,3,7,8-TCDD	20.0	NA	19.7	NA	99	98.5				
1,2,3,7,8-PeCDD	100		101		101	101				
1,2,3,4,7,8-HxCDD	100		107		107	107				
1,2,3,4,7,8,9-HpCDF	100		105		105	105				
OCDF	200		213		106	106				

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.



## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

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

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

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

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

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

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

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

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

Df = Dilution Factor.

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

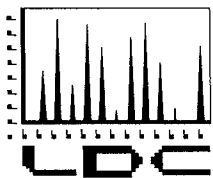
Example:

Sample I.D. 1, A:

Conc. =  $\frac{(326+349)(2000)(1)}{(1450410 + 1190397)(1.207)(40.19)(1)}$   
 $\rightarrow 0.0416 \text{ mg/Kg}$

[illegible]





## LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

CDM  
555 17th Street, Suite 1100  
Denver, CO 80202  
ATTN: Mrs. Cherie Zakowski

December 16, 2013

SUBJECT: Santa Susana Field Laboratory, Area IV, SA7 Data Validation

Dear Mrs. Zakowski,

Enclosed is the final validation report for the fractions listed below. This SDG was received on November 13, 2013. Attachment 1 is a summary of the samples that were reviewed for each analysis.

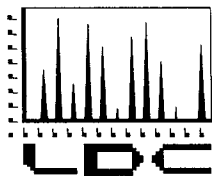
**LDC Project # 30840:**

<b><u>SDG #</u></b>	<b><u>Fraction</u></b>
PH121	Semivolatiles, Polychlorinated Biphenyls, Metals, Total Petroleum Hydrocarbons as Gasoline, Total Petroleum Hydrocarbons as Extractables, Dioxins/Dibenzofurans

The data validation was performed under Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Quality Assurance Project Plan for Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit, March 2009, Revision 4
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010
- Polychlorinated Dioxins/Dibenzofurans Data Review, September 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007





Please feel free to contact us if you have any questions.

Sincerely,

Shauna McKellar  
Project Manager/Chemist



30840ST-SA7.wpd



**Data Validation Report**  
**Santa Susana Field Laboratory**

**Subarea 7**

**SDG: PH121**

Prepared for

**CDM Smith**  
555 17th Street, Suite 1100  
Denver, CO 80202

Prepared by

**Laboratory Data Consultants, Inc**  
2701 Loker Ave West, Suite 220  
Carlsbad, California 92010

December 16, 2013



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected on October 2, 2013. Data validation was performed in accordance with 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), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)  
Polychlorinated Biphenyls (PCBs) by EPA SW 846 Method 8082A  
Metals by EPA SW 846 Method 6010C, 6020A, 7470A and 7471B  
Total Petroleum Hydrocarbons (TPH) as Gasoline by EPA SW 846 Method 8015M  
TPH as Extractables by EPA SW 846 Method 8015M  
Dioxins and Dibenzofurans by EPA Method 1613B

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment II. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards (dioxins only), matrix spike/matrix spike duplicates (MS/MSD), laboratory duplicates (DUP), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), ICP serial dilutions, method blanks, trip blanks, equipment blanks and field blanks. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the ICB/CCBs and ICP serial dilutions, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## 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 QC criteria.

## II. Initial Calibration

Initial Calibration data were not reviewed for level III.

## III. Continuing Calibration

Continuing calibration data were not reviewed for level III.

## IV. Blanks

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of several blanks for metals and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the following exceptions:

SDG/ Method	Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PH121/ 6010C	ICB/CCB	Molybdenum	3.3 ug/L	EB2-100213

Sample concentrations were compared to concentrations detected in the initial and continuing blanks. The sample concentrations were not detected or were significantly greater than the concentrations found in the associated blanks with the following exceptions:

SDG/Method	Sample	Compound	Reported Concentration	Modified Final Concentration
PH121/ 6010C	EB2-100213	Molybdenum	2.7 ug/L	2.7U ug/L

## V. Surrogate Spikes

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

## VI. ICP Interference Check Sample (ICS) Analysis

ICP interference check data were not reviewed for level III.



## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed at the required frequency. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one MS/MSD pair for metals. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The details regarding the qualification of data are provided in Enclosure I.

## VIII. Laboratory Duplicates Sample

Laboratory duplicates (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## IX. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of several LCS/LCSD pairs for SVOCs, PCBs, and TPH as extractables. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The details regarding the qualification of data are provided in Enclosure I.

## X. Internal Standards

Internal standards were reviewed for dioxins. Percent recoveries (%R) were within QC limits.

## XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-541-SA7-SB-2.0-3.0	Strontium	14 (≤10)	All soil samples in SDG PH121	J (all detects) UJ (all non-detects)	A

The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable.

## XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH121	All compounds reported as detected below the RL.	J (all detects)	A



### **XIII. Field Duplicate Samples**

No field duplicates were identified in this SDG.

### **XIV. Field Blank Samples**

One trip blank was collected and analyzed for TPH as gasoline. No volatile contaminants were found in the trip blank.

One equipment blank was collected and analyzed for SVOCs, PCBs, metals, TPH as gasoline, TPH as extractables and dioxins. The equipment blank had detections for SVOCs, metals and dioxins. The associated sample results were qualified as non-detected (U) due to equipment blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the equipment blanks were not qualified. The equipment blank outlier reports are presented in Enclosure I.

One field blank (from SDG PH029) was collected and analyzed for SVOCs, PCBs, metals, TPH as gasoline, TPH as extractables and dioxins. The field blank had detections for SVOCs, metals and dioxins. The associated sample results were qualified as non-detected (U) due to field blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the field blank were not qualified. The field blank outlier reports are presented in Enclosure I.

### **XV. Overall Assessment of Data**

No data associated with this sampling event were rejected. The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. All data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



**Attachment 1**

**Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Oct-2013	TB2-100213	7222780	TB	5030B	8015M	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	3050B	6010C	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	3050B	6020A	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	3546	8015M	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	3546	8082A	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	3546	8270D SIM	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	Gen Prep	160.3M	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	Gen Prep	9045M	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	METHOD	1613B	3
02-Oct-2013	SL-541-SA7-SB-0.0-0.5	7222778	N	METHOD	7471B	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	3050B	6010C	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	3050B	6020A	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	3546	8015M	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	3546	8082A	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	3546	8270D SIM	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	5035A	8015M	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	Gen Prep	160.3M	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	Gen Prep	9045M	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	METHOD	1613B	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0	7222779	N	METHOD	7471B	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0DUP	P222779D220659	DUP	METHOD	7471B	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0DUP	P222779D220738A	DUP	3050B	6020A	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0DUP	P222779D220738B	DUP	3050B	6020A	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0DUP	P222779D221257	DUP	3050B	6010C	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0DUP	P222779D292325B	DUP	Gen Prep	9045M	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0MSD	P222779M220703	MSD	METHOD	7471B	3



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Oct-2013	SL-541-SA7-SB-2.0-3.0MSD	P222779M220743A	MSD	3050B	6020A	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0MSD	P222779M220743B	MSD	3050B	6020A	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0MSD	P222779M221305	MSD	3050B	6010C	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0MS	P222779R220701	MS	METHOD	7471B	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0MS	P222779R220741A	MS	3050B	6020A	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0MS	P222779R220741B	MS	3050B	6020A	3
02-Oct-2013	SL-541-SA7-SB-2.0-3.0MS	P222779R221301	MS	3050B	6010C	3
02-Oct-2013	EB2-100213	7222777	EB	3005A	6010C	3
02-Oct-2013	EB2-100213	7222777	EB	3510C	8015M	3
02-Oct-2013	EB2-100213	7222777	EB	3510C	8082A	3
02-Oct-2013	EB2-100213	7222777	EB	3510C	8270D SIM	3
02-Oct-2013	EB2-100213	7222777	EB	5030B	8015M	3
02-Oct-2013	EB2-100213	7222777	EB	Gen Prep	9040C	3
02-Oct-2013	EB2-100213	7222777	EB	M3010A	6020A	3
02-Oct-2013	EB2-100213	7222777	EB	METHOD	1613B	3
02-Oct-2013	EB2-100213	7222777	EB	METHOD	7470A	3



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** AQ

**Sample ID:** EB2-100213

**Collected:** 10/2/2013 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
MOLYBDENUM	0.0027	J	0.0017	MDL	0.0200	PQL	mg/L	U	B

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

**Sample ID:** SL-541-SA7-SB-0.0-0.5

**Collected:** 10/2/2013 8:45:00

**Analysis Type:** REA

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.23	U	0.783	MDL	4.23	PQL	mg/Kg	UJ	Q
ARSENIC	2.05	J	0.741	MDL	4.23	PQL	mg/Kg	J	Z
BERYLLIUM	0.402	J	0.0709	MDL	1.06	PQL	mg/Kg	J	Z
BORON	5.20	J	0.889	MDL	10.6	PQL	mg/Kg	J	Z
CADMIUM	0.210	J	0.0804	MDL	1.06	PQL	mg/Kg	J	Z
MOLYBDENUM	1.41	J	0.180	MDL	2.12	PQL	mg/Kg	U	F, F
PHOSPHORUS	516		3.06	MDL	10.6	PQL	mg/Kg	J	Q, Q, E
POTASSIUM	2340		8.83	MDL	106	PQL	mg/Kg	J	Q
TIN	2.29	J	0.233	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.91	J	0.889	MDL	5.29	PQL	mg/Kg	J	Z

**Sample ID:** SL-541-SA7-SB-2.0-3.0

**Collected:** 10/2/2013 8:50:00

**Analysis Type:** REA

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.12	U	0.763	MDL	4.12	PQL	mg/Kg	UJ	Q
ARSENIC	4.06	J	0.722	MDL	4.12	PQL	mg/Kg	J	Z
BERYLLIUM	0.415	J	0.0691	MDL	1.03	PQL	mg/Kg	J	Z
BORON	6.34	J	0.866	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.219	J	0.0784	MDL	1.03	PQL	mg/Kg	J	Z
MOLYBDENUM	0.275	J	0.175	MDL	2.06	PQL	mg/Kg	U	F, F
PHOSPHORUS	383		2.98	MDL	10.3	PQL	mg/Kg	J	Q, Q, E
POTASSIUM	2580		8.60	MDL	103	PQL	mg/Kg	J	Q
TIN	2.64	J	0.227	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.37	J	0.866	MDL	5.15	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

**Project Name and Number:** 1204-002-001-AL - SSFL Area IV Phase 3

12/10/2013 1:17:55 PM

ADR version 1.7.0.207

Page 1 of 6



## Data Qualifier Summary

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

**Sample ID:** SL-541-SA7-SB-0.0-0.5

**Collected:** 10/2/2013 8:45:00

**Analysis Type:** REA

**Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	19.4		0.180	MDL	1.06	PQL	mg/Kg	J	Q, Q, E, A

**Sample ID:** SL-541-SA7-SB-2.0-3.0

**Collected:** 10/2/2013 8:50:00

**Analysis Type:** RES

**Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	18.6		0.0701	MDL	0.412	PQL	mg/Kg	J	Q, Q, E, A

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** AQ

**Sample ID:** EB2-100213

**Collected:** 10/2/2013 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	0.531	JB	0.182	MDL	9.67	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.342	JBQ	0.0854	MDL	9.67	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.249	JBQ	0.0916	MDL	9.67	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.297	JB	0.114	MDL	9.67	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.258	JB	0.203	MDL	9.67	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.210	JBQ	0.113	MDL	9.67	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.321	JBQ	0.190	MDL	9.67	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.317	JBQ	0.255	MDL	9.67	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.550	JBQ	0.145	MDL	9.67	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.363	JBQ	0.102	MDL	9.67	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.285	JBQ	0.133	MDL	9.67	PQL	pg/L	U	B
OCDD	1.33	JBQ	0.342	MDL	19.3	PQL	pg/L	U	B
OCDF	1.23	JBQ	0.248	MDL	19.3	PQL	pg/L	U	B

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

**Sample ID:** SL-541-SA7-SB-0.0-0.5

**Collected:** 10/2/2013 8:45:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.747	JB	0.0417	MDL	5.29	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

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## Data Qualifier Summary

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-541-SA7-SB-0.0-0.5

Collected: 10/2/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.115	JQ	0.0517	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.117	JQ	0.0628	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.150	J	0.0836	MDL	5.29	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0774	JBQ	0.0604	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.121	JQ	0.0790	MDL	5.29	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.103	JQ	0.0578	MDL	5.29	PQL	ng/Kg	J	Z
OCDF	1.30	JBQ	0.0871	MDL	10.6	PQL	ng/Kg	J	Z

Sample ID: SL-541-SA7-SB-2.0-3.0

Collected: 10/2/2013 8:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.397	JB	0.0685	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.0790	JBQ	0.0267	MDL	5.12	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0426	JQ	0.0326	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.115	JQ	0.107	MDL	5.12	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0742	JBQ	0.0661	MDL	5.12	PQL	ng/Kg	U	B
OCDD	4.27	JB	0.0765	MDL	10.2	PQL	ng/Kg	J	Z
OCDF	0.262	JBQ	0.0782	MDL	10.2	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M

Matrix: AQ

Sample ID: EB2-100213

Collected: 10/2/2013 2:30:00

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.096	U	0.048	MDL	0.096	PQL	mg/L	UJ	L

Method Category: SVOA

Method: 8015M

Matrix: SO

Sample ID: SL-541-SA7-SB-0.0-0.5

Collected: 10/2/2013 8:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	4.5	J	2.1	MDL	5.3	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

**Sample ID:** SL-541-SA7-SB-2.0-3.0

**Collected:** 10/2/2013 8:50:00

**Analysis Type:** REA

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	3.0	J	2.1	MDL	5.1	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** AQ

**Sample ID:** EB2-100213

**Collected:** 10/2/2013 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-METHYLNAPHTHALENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E

**Sample ID:** EB2-100213

**Collected:** 10/2/2013 2:30:00

**Analysis Type:** RES-BASE/NEUTRAL

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
ACENAPHTHENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
ACENAPHTHYLENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
ANTHRACENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
BENZO(A)ANTHRACENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
BENZO(A)PYRENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
BENZO(B)FLUORANTHENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
BENZO(E)PYRENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
BENZO(G,H,I)PERYLENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	E
BENZO(K)FLUORANTHENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
BIS(2-ETHYLHEXYL)PHTHALATE	0.41	J	0.053	MDL	1.1	PQL	ug/L	J	Z, E
Butylbenzylphthalate	1.1	U	0.053	MDL	1.1	PQL	ug/L	UJ	E
CHRYSENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
Diethylphthalate	0.29	J	0.053	MDL	1.1	PQL	ug/L	J	Z, L, E
Dimethylphthalate	1.1	U	0.053	MDL	1.1	PQL	ug/L	UJ	E
Di-n-butylphthalate	0.25	J	0.053	MDL	1.1	PQL	ug/L	J	Z, L, E
FLUORANTHENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
FLUORENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E
NAPHTHALENE	0.053	U	0.032	MDL	0.053	PQL	ug/L	UJ	L, E
PHENANTHRENE	0.053	U	0.032	MDL	0.053	PQL	ug/L	UJ	L, E
PYRENE	0.053	U	0.011	MDL	0.053	PQL	ug/L	UJ	L, E

\* denotes a non-reportable result

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## Data Qualifier Summary

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-541-SA7-SB-2.0-3.0

Collected: 10/2/2013 8:50:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.42	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
<b>*#</b>	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Upper Estimation
Q	Laboratory 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 Upper Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH121



# Method Blank Outlier Report

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method: 1613B

Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK2810B371346	10/10/2013 1:46:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.614 pg/L 0.745 pg/L 0.694 pg/L 0.571 pg/L 0.572 pg/L 0.559 pg/L 0.348 pg/L 0.600 pg/L 0.427 pg/L 0.502 pg/L 0.387 pg/L 0.364 pg/L 1.53 pg/L 2.35 pg/L	EB2-100213

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB2-100213(RES)	1,2,3,4,6,7,8-HPCDD	0.531 pg/L	0.531U pg/L
EB2-100213(RES)	1,2,3,4,6,7,8-HPCDF	0.342 pg/L	0.342U pg/L
EB2-100213(RES)	1,2,3,4,7,8,9-HPCDF	0.249 pg/L	0.249U pg/L
EB2-100213(RES)	1,2,3,4,7,8-HXCDF	0.297 pg/L	0.297U pg/L
EB2-100213(RES)	1,2,3,6,7,8-HXCDD	0.258 pg/L	0.258U pg/L
EB2-100213(RES)	1,2,3,6,7,8-HXCDF	0.210 pg/L	0.210U pg/L
EB2-100213(RES)	1,2,3,7,8,9-HXCDD	0.321 pg/L	0.321U pg/L
EB2-100213(RES)	1,2,3,7,8-PECDD	0.317 pg/L	0.317U pg/L
EB2-100213(RES)	1,2,3,7,8-PECDF	0.550 pg/L	0.550U pg/L
EB2-100213(RES)	2,3,4,6,7,8-HXCDF	0.363 pg/L	0.363U pg/L
EB2-100213(RES)	2,3,4,7,8-PECDF	0.285 pg/L	0.285U pg/L
EB2-100213(RES)	OCDD	1.33 pg/L	1.33U pg/L
EB2-100213(RES)	OCDF	1.23 pg/L	1.23U pg/L

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK2830B371446	10/14/2013 2:46:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,6,7,8-HXCDF 1,2,3,7,8-PECDF OCDD OCDF	0.0753 ng/Kg 0.0423 ng/Kg 0.0948 ng/Kg 0.0800 ng/Kg 0.215 ng/Kg 0.137 ng/Kg	SL-541-SA7-SB-0.0-0.5 SL-541-SA7-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-541-SA7-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0774 ng/Kg	0.0774U ng/Kg
SL-541-SA7-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0790 ng/Kg	0.0790U ng/Kg
SL-541-SA7-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0742 ng/Kg	0.0742U ng/Kg
SL-541-SA7-SB-2.0-3.0(RES)	OCDF	0.262 ng/Kg	0.262U ng/Kg

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

<b>Method:</b> 6010C				
<b>Matrix:</b> AQ				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P28135AB221117	10/12/2013 11:17:00 AM	PHOSPHORUS POTASSIUM ZINC	0.0547 mg/L 0.203 mg/L 0.0059 mg/L	EB2-100213

<b>Method:</b> 6010C				
<b>Matrix:</b> SO				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P28137AB221240	10/14/2013 12:40:00 PM	ALUMINUM CALCIUM IRON MAGNESIUM TIN ZINC	9.86 mg/Kg 12.9 mg/Kg 3.84 mg/Kg 2.49 mg/Kg 1.41 mg/Kg 0.656 mg/Kg	SL-541-SA7-SB-0.0-0.5 SL-541-SA7-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-541-SA7-SB-0.0-0.5(REA)	TIN	2.29 mg/Kg	2.29U mg/Kg
SL-541-SA7-SB-2.0-3.0(REA)	TIN	2.64 mg/Kg	2.64U mg/Kg



# Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PrepPH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method: 6010C

Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB2-100213(RES)	10/2/2013 2:30:00 PM	MOLYBDENUM	0.0027 mg/L	SL-541-SA7-SB-0.0-0.5 SL-541-SA7-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-541-SA7-SB-0.0-0.5(REA)	MOLYBDENUM	1.41 mg/Kg	1.41U mg/Kg
SL-541-SA7-SB-2.0-3.0(REA)	MOLYBDENUM	0.275 mg/Kg	0.275U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

12/16/2013 10:20:08 AM

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## Field Blank Outlier Report

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PrepPH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method: 6010C

Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041613(REA2/TOT)	4/16/2013 3:15:00 PM	MOLYBDENUM TIN	0.0132 mg/L 0.0029 mg/L	SL-541-SA7-SB-0.0-0.5 SL-541-SA7-SB-2.0-3.0

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-541-SA7-SB-0.0-0.5(REA)	MOLYBDENUM	1.41 mg/Kg	1.41U mg/Kg
SL-541-SA7-SB-2.0-3.0(REA)	MOLYBDENUM	0.275 mg/Kg	0.275U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

12/16/2013 10:20:02 AM

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# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method: 6010C

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-541-SA7-SB-2.0-3.0MS (TOT)	ALUMINUM	2134	1672	75.00-125.00	-	ALUMINUM	J (all detects)  Al, Fe, Mg, Mn, Ti, No Qual, >4x
SL-541-SA7-SB-2.0-3.0MSD (TOT)	IRON	2130	574	75.00-125.00	-	IRON	
(SL-541-SA7-SB-0.0-0.5	MAGNESIUM	560	327	75.00-125.00	-	MAGNESIUM	
SL-541-SA7-SB-2.0-3.0)	MANGANESE	158	-	75.00-125.00	-	MANGANESE	
	POTASSIUM	136	-	75.00-125.00	-	POTASSIUM	
	TITANIUM	525	340	75.00-125.00	-	TITANIUM	
SL-541-SA7-SB-2.0-3.0MS (TOT)	CALCIUM	-7	-181	75.00-125.00	-	CALCIUM	No Qual, >4x
SL-541-SA7-SB-2.0-3.0MSD (TOT)							
(SL-541-SA7-SB-0.0-0.5							
SL-541-SA7-SB-2.0-3.0)							
SL-541-SA7-SB-2.0-3.0MS (TOT)	ANTIMONY	58	50	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-541-SA7-SB-2.0-3.0MSD (TOT)	PHOSPHORUS	298	38	75.00-125.00	48 (20.00)	PHOSPHORUS	
(SL-541-SA7-SB-0.0-0.5							
SL-541-SA7-SB-2.0-3.0)							

Method: 6020A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-541-SA7-SB-2.0-3.0MS (TOT)	STRONTIUM	42	263	75.00-125.00	57 (20.00)	STRONTIUM	J(all detects) UJ(all non-detects)
SL-541-SA7-SB-2.0-3.0MSD (TOT)							
(SL-541-SA7-SB-0.0-0.5							
SL-541-SA7-SB-2.0-3.0)							



## Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method: 6010C

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-541-SA7-SB-2.0-3.0DUP (TOT) (SL-541-SA7-SB-0.0-0.5 SL-541-SA7-SB-2.0-3.0)	Zirconium	37	20.00	No Qual, OK by Difference



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

**Method:** 8015M

**Matrix:** AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P32808AQ321759A P32808AY321820A (EB2-100213)	EFH (C8-C11)	64	65	70.00-130.00	-	EFH (C8-C11)	J(all detects) UJ(all non-detects)

**Method:** 8270D SIM

**Matrix:** AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WILCSQ262241 P2WILCSY262310 (EB2-100213)	1-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE ACENAPHTHENE ACENAPHTHYLENE ANTHRACENE BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(E)PYRENE BENZO(G,H,I)PERYLENE BENZO(K)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALAT Butylbenzylphthalate CHRYSENE Diethylphthalate Dimethylphthalate Di-n-butylphthalate FLUORANTHENE FLUORENE NAPHTHALENE PHENANTHRENE PYRENE	60 58 57 57 60 62 65 66 60 - 71 - - 63 63 - 61 61 55 57 58 61	- -	80.00-126.00 81.00-124.00 80.00-123.00 78.00-120.00 78.00-123.00 73.00-127.00 72.00-120.00 79.00-136.00 70.00-130.00 64.00-130.00 73.00-131.00 70.00-143.00 40.00-138.00 76.00-125.00 64.00-128.00 23.00-139.00 64.00-141.00 79.00-124.00 74.00-115.00 75.00-120.00 75.00-120.00 71.00-130.00	55 (30.00) 56 (30.00) 53 (30.00) 59 (30.00) 53 (30.00) 50 (30.00) 47 (30.00) 47 (30.00) 49 (30.00) 33 (30.00) 45 (30.00) 58 (30.00) 50 (30.00) 45 (30.00) 49 (30.00) 50 (30.00) 50 (30.00) 51 (30.00) 55 (30.00) 56 (30.00) 52 (30.00) 48 (30.00)	1-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE ACENAPHTHENE ACENAPHTHYLENE ANTHRACENE BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(E)PYRENE BENZO(G,H,I)PERYLENE BENZO(K)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALA Butylbenzylphthalate CHRYSENE Diethylphthalate Dimethylphthalate Di-n-butylphthalate FLUORANTHENE FLUORENE NAPHTHALENE PHENANTHRENE PYRENE	J(all detects) UJ(all non-detects)

**Method:** 8082A

**Matrix:** SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P32788AY242339A (SL-541-SA7-SB-0.0-0.5 SL-541-SA7-SB-2.0-3.0)	Aroclor 5442	-	90	62.00-87.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects)

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Reporting Limit Outliers

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB2-100213	1,2,3,4,6,7,8-HPCDD	JB	0.531	9.67	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.342	9.67	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.249	9.67	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.297	9.67	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JB	0.258	9.67	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.210	9.67	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.321	9.67	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.317	9.67	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.550	9.67	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.363	9.67	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.285	9.67	PQL	pg/L	
	OCDD	JBQ	1.33	19.3	PQL	pg/L	
	OCDF	JBQ	1.23	19.3	PQL	pg/L	

Method: 6010C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB2-100213	MOLYBDENUM	J	0.0027	0.0200	PQL	mg/L	J (all detects)

Method: 8270D SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB2-100213	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.41	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.29	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.25	1.1	PQL	ug/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-541-SA7-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.747	5.29	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JQ	0.115	5.29	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JQ	0.117	5.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.150	5.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0774	5.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.121	5.29	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JQ	0.103	5.29	PQL	ng/Kg	
	OCDF	JBQ	1.30	10.6	PQL	ng/Kg	
SL-541-SA7-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	0.397	5.12	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0790	5.12	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0426	5.12	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.115	5.12	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0742	5.12	PQL	ng/Kg	
	OCDD	JB	4.27	10.2	PQL	ng/Kg	
	OCDF	JBQ	0.262	10.2	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH121

Laboratory: LL

EDD Filename: PH121

eQAPP Name: CDM\_SSFL\_131101\_Lan

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-541-SA7-SB-0.0-0.5	ARSENIC	J	2.05	4.23	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.402	1.06	PQL	mg/Kg	
	BORON	J	5.20	10.6	PQL	mg/Kg	
	CADMIUM	J	0.210	1.06	PQL	mg/Kg	
	MOLYBDENUM	J	1.41	2.12	PQL	mg/Kg	
	TIN	J	2.29	10.6	PQL	mg/Kg	
	Zirconium	J	1.91	5.29	PQL	mg/Kg	
SL-541-SA7-SB-2.0-3.0	ARSENIC	J	4.06	4.12	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.415	1.03	PQL	mg/Kg	
	BORON	J	6.34	10.3	PQL	mg/Kg	
	CADMIUM	J	0.219	1.03	PQL	mg/Kg	
	MOLYBDENUM	J	0.275	2.06	PQL	mg/Kg	
	TIN	J	2.64	10.3	PQL	mg/Kg	
	Zirconium	J	2.37	5.15	PQL	mg/Kg	

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-541-SA7-SB-0.0-0.5	EFH (C21-C30)	J	4.5	5.3	PQL	mg/Kg	J (all detects)
SL-541-SA7-SB-2.0-3.0	EFH (C21-C30)	J	3.0	5.1	PQL	mg/Kg	J (all detects)

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-541-SA7-SB-2.0-3.0	CHRYSENE	J	0.42	1.7	PQL	ug/Kg	J (all detects)



LDC #: 30840A4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH121

ADR

Laboratory: Eurofins Lancaster Laboratories

Date: 11/19/10

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

**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: 10/2/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	SW MS/D	
VII.	Duplicate Sample Analysis	SW Dup	
VIII.	Laboratory Control Samples (LCS)	A LCS	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV.	Field Blanks	SW EB=1 FB=CH1113	

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

(PH029)

Validated Samples:

1	EB2-100213	11		21		31	
2	SL-541-SA7-SB-0.0-0.5	12		22		32	
3	SL-541-SA7-SB-2.0-3.0	13		23		33	
4	↓ MS	14		24		34	
5	↓ MS/D	15		25		35	
6	↓ Dup	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



LDC #: 30840A4

## VALIDATION FINDINGS WORKSHEET

## PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

Soil preparation factor applied: \_\_\_\_\_

Reason: B

Sample Concentration units, unless otherwise noted: ug/L

Associated Samples: All Water

					Sample Identification									
Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/l )	Maximum ICB/CCB <sup>a</sup> (ug/l )	Action Level	1									
Mo			3.3	16.5	2.7									

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.



LDC #: 30840A4

**VALIDATION FINDINGS WORKSHEET**  
**Field Blanks**

Page: 1 of 1  
Reviewer: [Signature]  
2nd Reviewer: [Signature]

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

**Blank units:** mg/L **Associated sample units:** mg/Kg Reason: F

**Sampling date:** EB=4/24/13 FB=4/11/13 Soil factor applied 100x

**Field blank type:** (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ Associated Samples: All

Analyte	Blank ID	Blank ID	Sample Identification										
	EB2-100213	FB-041113	Action Limit	2	3								
Cu		0.0036	1.8										
Mo	0.0027	0.0036	1.8	1.4	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".





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# QUALITY ASSURANCE SUMMARY

FORM 5A (MS/MSD)

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

SDG No.: PH121

Matrix: SOIL

Level

(low/med):

LOW

Background Lab Sample ID: 7222779BKG Matrix Spike Lab Sample ID: 7222779MS Matrix Spike Duplicate Lab Sample ID: 7222779MSD  
Batch Id(s): P28137A, P28138A

Analyte	Mass	BKG Sample		MS Sample		MSD Sample		MS Spike Added	MSD Spike Added	Units	MS		MSD		RPD	Control Limit		M
		Result	C	Result	C	Result	C				%R	Q	%R	Q		%R	RPD	
Aluminum		8799.6360		13068.1010		12078.2971		200.0000	196.0784	MG/KG	2134		1672		8		20	P
Antimony		0.7400	U	29.0050		24.4275		50.0000	49.0196	MG/KG	58	N	50	N	17	75 - 125	20	P
Arsenic		3.9390	B	19.3520		17.9578		15.0000	14.7059	MG/KG	103		95		7	75 - 125	20	P
Barium		60.6460		269.9170		251.4127		200.0000	196.0784	MG/KG	105		97		7	75 - 125	20	P
Beryllium		0.4030	B	5.4450		5.1137		5.0000	4.9020	MG/KG	101		96		6	75 - 125	20	P
Boron		6.1470	B	188.6330		177.9010		200.0000	196.0784	MG/KG	91		88		6	75 - 125	20	P
Cadmium		0.2120	B	5.0230		4.7667		5.0000	4.9020	MG/KG	96		93		5	75 - 125	20	P
Calcium		7358.5680		7332.3100		6649.1500		400.0000	392.1569	MG/KG	-7		-181		10		20	P
Chromium		14.2260		37.9290		34.6029		20.0000	19.6078	MG/KG	119		104		9	75 - 125	20	P
Cobalt		3.8340		52.4070		49.4451		50.0000	49.0196	MG/KG	97		93		6	75 - 125	20	P
Copper		9.1640		36.8020		34.6912		25.0000	24.5098	MG/KG	111		104		6	75 - 125	20	P
Iron		15470.9920		17600.7990		16033.4804		100.0000	98.0392	MG/KG	2130		574		9		20	P
Lead		3.2920		18.0690		17.2608		15.0000	14.7059	MG/KG	99		95		5	75 - 125	20	P
Lithium		26.9150		132.9510		124.7186		100.0000	98.0392	MG/KG	106		100		6	75 - 125	20	P
Magnesium		4335.1380		5456.0200		4975.5382		200.0000	196.0784	MG/KG	560		327		9		20	P
Manganese		220.7210		299.8190		272.3167		50.0000	49.0196	MG/KG	158		105		10		20	P
Mercury		0.0095	U	0.1763		0.1702		0.1591	0.1603	MG/KG	111		106		4	65 - 135	20	CV
Molybdenum		0.2670	B	197.7080		187.9088		200.0000	196.0784	MG/KG	99		96		5	75 - 125	20	P
Nickel		7.1070		56.4800		53.2784		50.0000	49.0196	MG/KG	99		94		6	75 - 125	20	P
Phosphorus		371.4670		669.6260		408.2490		100.0000	98.0392	MG/KG	298	N	38	N	48	75 - 125	20	P
Potassium		2503.3450		3866.6460		3531.4941		1000.0000	980.3922	MG/KG	136	N	105		9	75 - 125	20	P
Selenium	78	0.1000	U	2.1886		2.1788		2.0000	1.9608	MG/KG	109		111		0	75 - 125	20	MS
Silver	107	0.0260	U	11.1040		10.7953		10.0000	9.8039	MG/KG	111		110		3	75 - 125	20	MS
Sodium		108.0330		1130.2260		1071.5559		1000.0000	980.3922	MG/KG	102		98		5	75 - 125	20	P
Strontium	88	17.9954		21.3894		38.6059		8.0000	7.8431	MG/KG	42	N	263	N	57	75 - 125	20	MS
Thallium	203	0.2410		0.6674		0.6410		0.4000	0.3922	MG/KG	107		102		4	75 - 125	20	MS

Note: Results shown are reported on an as-received basis.

## METHODS:

P = ICP Atomic Emission Spectrometer

CV = Cold Vapor

MS = ICP Mass Spectrometry

AF = Cold Vapor Atomic Fluorescence

## CONCENTRATION QUALIFIERS:

U= Below MDL, B= Below LOQ

## FLAGS:

N = Matrix Spike OOS, \* = Duplicate OOS





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# QUALITY ASSURANCE SUMMARY

FORM 5A (MS/MSD)

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

SDG No.: PH121

Matrix: SOIL

Level

(low/med):

LOW

7/1

Background Lab Sample ID: 7222779BKG Matrix Spike Lab Sample ID: 7222779MS Matrix Spike Duplicate Lab Sample ID: 7222779MSD  
Batch Id(s): P28137A, P28138A

Analyte	Mass	BKG Sample		MS Sample		MSD Sample		MS Spike Added	MSD Spike Added	Units	MS		MSD		RPD	Q	Control Limit			
		Result	C	Result	C	Result	C				%R	Q	%R	Q			%R	RPD	M	
Tin		2.5610	B	367.1930		349.8529		400.0000	392.1569	MG/KG	91		89		5		75 - 125	20	P	
Titanium		807.9810		1332.4900		1441.6324		100.0000	98.0392	MG/KG	525		340		15				20	P
Vanadium		26.8100		84.7210		77.9069		50.0000	49.0196	MG/KG	116		104		8		75 - 125	20	P	
Zinc		47.3640		99.6600		92.8225		50.0000	49.0196	MG/KG	105		93		7		75 - 125	20	P	
Zirconium		2.3020	B	104.5550		99.5627		100.0000	98.0392	MG/KG	102		99		5		75 - 125	20	P	

Note: Results shown are reported on an as-received basis.

## METHODS:

P = ICP Atomic Emission Spectrometer

CV = Cold Vapor

MS = ICP Mass Spectrometry

AF = Cold Vapor Atomic Fluorescence

## CONCENTRATION QUALIFIERS:

U= Below MDL, B= Below LOQ

## FLAGS:

N = Matrix Spike OOS, \* = Duplicate OOS



QUALITY ASSURANCE SUMMARY

FORM 6

DUPLICATES

SDG No.: PH121

Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 7222779BKG

Duplicate Lab Sample ID: 7222779DUP

Batch ID(s): P28137A, P28138A

Concentration Units: MG/KG

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			8799.6360		9903.5330		12		P
Antimony			0.7400	U	0.7184	U			P
Arsenic		4.0	3.9390	B	4.2398		7		P
Barium			60.6460		66.5583		9		P
Beryllium			0.4030	B	0.4126	B	2		P
Boron			6.1470	B	6.1097	B	1		P
Cadmium			0.2120	B	0.2544	B	18		P
Calcium			7358.5680		7550.0359		3		P
Chromium		3.0	14.2260		17.2592		19		P
Cobalt		1.0	3.8340		4.4146		14		P
Copper		2.0	9.1640		10.0825		10		P
Iron			15470.9920		17181.1981		10		P
Lead		3.0	3.2920		3.9136		17		P
Lithium			26.9150		30.1515		11		P
Magnesium			4335.1380		4902.4117		12		P
Manganese			220.7210		249.9136		12		P
Mercury			0.0095	U	0.0096	U			CV
Molybdenum			0.2670	B	0.2903	B	8		P
Nickel		2.0	7.1070		8.3971		17		P
Phosphorus			371.4670		361.6796		3		P
Potassium			2503.3450		2762.5117		10		P
Selenium	78		0.1000	U	0.0971	U			MS
Silver	107		0.0260	U	0.0252	U			MS
Sodium		100.0	108.0330		126.4796		16		P
Strontium	88		17.9954		18.1522		1		MS
Thallium	203	0.2	0.2410		0.2573		7		MS
Tin			2.5610	B	2.5806	B	1		P
Titanium			807.9810		895.8252		10		P
Vanadium			26.8100		29.7757		10		P
Zinc			47.3640		51.1583		8		P
Zirconium			2.3020	B	3.3583	B	37		P

RPD  
≤20  
OK

NOTE: An asterisk (\*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).  
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

*As by difference*

Note: Results shown are reported on an as-received basis.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	2224 = Duplicate Out of Spec





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# QUALITY ASSURANCE SUMMARY

FORM 9

SERIAL DILUTIONS

SDG No.: PH121

Matrix: SOIL

Level

LOW

(low/med):

Background Lab Sample ID: 7222779BKG

Serial Dilution Lab Sample ID: 7222779L

Batch ID(s): P28137A

Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		87996.3600		89863.1000		2		P
Antimony		7.4000	U	37.0000	U			P
Arsenic		39.3900	B	35.0000	U	100		P
Barium		606.4600		608.0000		0		P
Beryllium		4.0300	B	4.2500	B	5		P
Boron		61.4700	B	85.1500	B	39		P
Cadmium		2.1200	B	3.8000	U	100		P
Calcium		73585.6800		76376.6500		4		P
Chromium		142.2600		145.9000	B	3		P
Cobalt		38.3400		42.7000	B	11		P
Copper		91.6400		103.2000		13		P
Iron		154709.9200		157701.1000		2		P
Lead		32.9200		28.6500	B	13		P
Lithium		269.1500		272.7500		1		P
Magnesium		43351.3800		44447.1500		3		P
Manganese		2207.2100		2258.0500		2		P
Molybdenum		2.6700	B	8.5000	U	100		P
Nickel		71.0700		74.4500	B	5		P
Phosphorus		3714.6700		3668.8500		1		P
Potassium		25033.4500		25161.0000		1		P
Selenium	78	0.5000	U	2.5000	U			MS
Silver	107	0.1300	U	0.6500	U			MS
Sodium		1080.3300		1088.2500	B	1		P
Strontium	88	89.9770		77.4100		14		E MS
Thallium	203	1.2050		1.2650	B	5		MS
Tin		25.6100	B	30.6000	B	19		P
Titanium		8079.8100		8058.1000		0		P
Vanadium		268.1000		272.2500		2		P
Zinc		473.6400		470.6000		1		P
Zirconium		23.0200	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

*[Handwritten signature]*

## METHODS:

P = ICP Atomic Emission Spectrometer  
MS = ICP Mass Spectrometry

## CONCENTRATION QUALIFIERS:

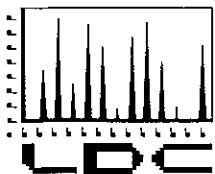
U= Below MDL  
B= Below LOQ

## FLAGS:

E = Matrix Effects exist as proven by

PH121 Page 2226 of 2476 Serial Dilution or Spiked Dilution





## LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

CDM  
555 17th Street, Suite 1100  
Denver, CO 80202  
ATTN: Mrs. Cherie Zakowski

February 25, 2014

SUBJECT: Santa Susana Field Laboratory, Subarea NBZ Data Validation

Dear Mrs. Zakowski,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on January 24, 2014. Attachment 1 is a summary of the samples that were reviewed for each analysis.

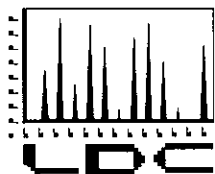
**LDC Project # 31224:**

<b><u>SDG #</u></b>	<b><u>Fraction</u></b>
PH138	Semivolatiles, Chlorinated Pesticides, Polychlorinated Biphenyls,
PH139	Metals, Total Petroleum Hydrocarbons as Gasoline, Cyanide,
PH157	Total Petroleum Hydrocarbons as Extractables, Dioxins/Dibenzofurans, Herbicides

The data validation was performed under Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Quality Assurance Project Plan for Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit, March 2009, Revision 4
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010
- Polychlorinated Dioxins/Dibenzofurans Data Review, September 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007





Please feel free to contact us if you have any questions.

Sincerely,

Shauna McKellar  
Project Manager/Chemist



**LDC #31224 (CDM Federal Programs-Chantilly VA / Santa Susana Field Laboratory, Subarea NBZ)**

31224ST-NBZ.wpd



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH138**

Prepared for

**CDM Smith**  
555 17th Street, Suite 1100  
Denver, CO 80202

Prepared by

**Laboratory Data Consultants, Inc.**  
2701 Loker Ave West, Suite 220  
Carlsbad, California 92010

February 21, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected on December 3, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) 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 (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)

Pesticides by EPA SW 846 Method 8081B

Polychlorinated Biphenyls (PCBs) by EPA SW 846 Method 8082A

Herbicides by EPA SW 846 Method 8151A

Total Petroleum Hydrocarbons (TPH) as Gasoline by EPA SW 846 Method 8015M

TPH as Extractables by EPA SW 846 Method 8015M

Dioxins and Dibenzofurans by EPA Method 1613B

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, surrogates, internal standards (dioxins only), matrix spike/matrix spike duplicates (MS/MSD), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), method blanks, trip blanks, equipment blanks, field blanks and field duplicate samples. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013). Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

Initial Calibration data were not reviewed for level III.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for level III.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of two blanks for SVOCs and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

## **V. Surrogate Spikes**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed at the required frequency. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one MS/MSD pair for TPH as extractables. No data were qualified for due to high %Rs since the associated results were non-detected.

## **VII. Laboratory Duplicates Sample**

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

## **VIII. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of several LCS/LCSD pairs for SVOCs and herbicides. The associated sample results were qualified as non-detected estimated (UJ). The details regarding the qualification of data are provided in Enclosure I.



## IX. Internal Standards

Internal standards were reviewed for dioxins. Percent recoveries (%R) were within QC limits.

## X. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH138	All compounds reported as detected below the RL.	J (all detects)	A

## XI. Field Duplicate Samples

Two field duplicate pairs were collected and analyzed for SVOCs, pesticides, PCBs, TPH as gasoline, TPH as extractables and dioxins. All RPDs were within QC limits with the exception of several dioxins. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The field duplicate result comparisons are provided in Enclosure I.

## XII. Field Blank Samples

One trip blank was collected and analyzed for TPH as gasoline. No contaminants were found in the trip blank.

Two equipment blanks (from SDG PH140) were collected and analyzed for SVOCs, pesticides, PCBs, herbicides, TPH as extractables and dioxins. The equipment blank had detections for SVOCs and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the equipment blank, therefore no data were qualified. EB-120313 was collected and analyzed for SVOCs in this SDG but was not associated to any samples.

One field blank (from SDG PH032) was collected and analyzed for SVOCs, pesticides, PCBs, herbicides, TPH as gasoline, TPH as extractables and dioxins. The field blank had detections for SVOCs and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the field blank, therefore no data were qualified.

## XIII. Overall Assessment of Data

The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. The remainder of the data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



**Attachment 1**  
**Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2013	TB-120313	7300106	TB	5030B	8015M	III
03-Dec-2013	SL-502-NBZ-SB-0.0-0.5	7300094	N	3546	8015M	III
03-Dec-2013	SL-502-NBZ-SB-0.0-0.5	7300094	N	3546	8081B	III
03-Dec-2013	SL-502-NBZ-SB-4.0-5.0	7300095	N	3546	8015M	III
03-Dec-2013	SL-502-NBZ-SB-4.0-5.0	7300095	N	3546	8081B	III
03-Dec-2013	SL-502-NBZ-SB-4.0-5.0	7300095	N	5035A	8015M	III
03-Dec-2013	SL-530-NBZ-SB-0.0-0.5	7300102	N	3546	8015M	III
03-Dec-2013	SL-530-NBZ-SB-0.0-0.5	7300102	N	3546	8081B	III
03-Dec-2013	SL-503-NBZ-SB-0.0-0.5	7300096	N	3546	8015M	III
03-Dec-2013	SL-503-NBZ-SB-0.0-0.5	7300096	N	3546	8081B	III
03-Dec-2013	SL-503-NBZ-SB-2.0-3.0	7300097	N	3546	8015M	III
03-Dec-2013	SL-503-NBZ-SB-2.0-3.0	7300097	N	3546	8081B	III
03-Dec-2013	SL-503-NBZ-SB-2.0-3.0	7300097	N	5035A	8015M	III
03-Dec-2013	SL-532-NBZ-SB-0.0-0.5	7300104	N	3546	8015M	III
03-Dec-2013	SL-532-NBZ-SB-0.0-0.5	7300104	N	3546	8081B	III
03-Dec-2013	SL-504-NBZ-SB-0.0-0.5	7300098	N	3546	8015M	III
03-Dec-2013	SL-504-NBZ-SB-0.0-0.5	7300098	N	3546	8081B	III
03-Dec-2013	SL-504-NBZ-SB-0.0-0.5MS	7300099	MS	3546	8015M	III
03-Dec-2013	SL-504-NBZ-SB-0.0-0.5MS	7300099	MS	3546	8081B	III
03-Dec-2013	SL-504-NBZ-SB-0.0-0.5MSD	7300100	MSD	3546	8015M	III
03-Dec-2013	SL-504-NBZ-SB-0.0-0.5MSD	7300100	MSD	3546	8081B	III
03-Dec-2013	SL-804-NBZ-SB-0.0-0.5	7300101	FD	3546	8015M	III
03-Dec-2013	SL-804-NBZ-SB-0.0-0.5	7300101	FD	3546	8081B	III
03-Dec-2013	SL-533-NBZ-SB-0.0-0.5	7300105	N	3546	8015M	III
03-Dec-2013	SL-533-NBZ-SB-0.0-0.5	7300105	N	3550B	8151A	III
03-Dec-2013	SL-509-NBZ-SB-0.0-0.5	7300107	N	3546	8015M	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
03-Dec-2013	SL-509-NBZ-SB-0.0-0.5	7300107	N	3546	8081B	III
03-Dec-2013	SL-509-NBZ-SB-0.0-0.5	7300107	N	3546	8082A	III
03-Dec-2013	SL-509-NBZ-SB-0.0-0.5	7300107	N	3546	8270D SIM	III
03-Dec-2013	SL-509-NBZ-SB-0.0-0.5	7300107	N	METHOD	1613B	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5	7300108	N	3546	8015M	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5	7300108	N	3546	8081B	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5	7300108	N	3546	8082A	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5	7300108	N	3546	8270D SIM	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5	7300108	N	5035A	8015M	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5	7300108	N	METHOD	1613B	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MS	7300109	MS	3546	8015M	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MS	7300109	MS	3546	8081B	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MS	7300109	MS	3546	8082A	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MS	7300109	MS	3546	8270D SIM	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MS	7300109	MS	5035A	8015M	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MS	7300109	MS	METHOD	1613B	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MSD	7300110	MSD	3546	8015M	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MSD	7300110	MSD	3546	8081B	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MSD	7300110	MSD	3546	8082A	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MSD	7300110	MSD	3546	8270D SIM	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MSD	7300110	MSD	5035A	8015M	III
03-Dec-2013	SL-509-NBZ-SB-2.5-3.5MSD	7300110	MSD	METHOD	1613B	III
03-Dec-2013	SL-809-NBZ-SB-2.5-3.5	7300112	FD	3546	8015M	III
03-Dec-2013	SL-809-NBZ-SB-2.5-3.5	7300112	FD	3546	8081B	III
03-Dec-2013	SL-809-NBZ-SB-2.5-3.5	7300112	FD	3546	8082A	III
03-Dec-2013	SL-809-NBZ-SB-2.5-3.5	7300112	FD	3546	8270D SIM	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
03-Dec-2013	SL-809-NBZ-SB-2.5-3.5	7300112	FD	5035A	8015M	III
03-Dec-2013	SL-809-NBZ-SB-2.5-3.5	7300112	FD	METHOD	1613B	III
03-Dec-2013	SL-531-NBZ-SB-0.0-0.5	7300103	N	3546	8015M	III
03-Dec-2013	SL-531-NBZ-SB-0.0-0.5	7300103	N	3546	8081B	III
03-Dec-2013	SL-510-NBZ-SB-0.0-0.5	7300113	N	3546	8015M	III
03-Dec-2013	SL-510-NBZ-SB-0.0-0.5	7300113	N	3546	8081B	III
03-Dec-2013	SL-510-NBZ-SB-0.0-0.5	7300113	N	3546	8082A	III
03-Dec-2013	SL-510-NBZ-SB-0.0-0.5	7300113	N	3546	8270D SIM	III
03-Dec-2013	SL-510-NBZ-SB-0.0-0.5	7300113	N	METHOD	1613B	III
03-Dec-2013	SL-510-NBZ-SB-4.0-5.0	7300114	N	3546	8015M	III
03-Dec-2013	SL-510-NBZ-SB-4.0-5.0	7300114	N	3546	8081B	III
03-Dec-2013	SL-510-NBZ-SB-4.0-5.0	7300114	N	3546	8082A	III
03-Dec-2013	SL-510-NBZ-SB-4.0-5.0	7300114	N	3546	8270D SIM	III
03-Dec-2013	SL-510-NBZ-SB-4.0-5.0	7300114	N	5035A	8015M	III
03-Dec-2013	SL-510-NBZ-SB-4.0-5.0	7300114	N	METHOD	1613B	III
03-Dec-2013	EB-120313	7300115	EB	3510C	8270D SIM	III



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PrepPH138

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-509-NBZ-SB-0.0-0.5

Collected: 12/3/2013 1:15:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.626	JBQ	0.0662	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.196	JBQ	0.0511	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.155	JBQ	0.0795	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.831	JB	0.0586	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.0801	JBQ	0.0410	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.139	JBQ	0.0527	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0603	JBQ	0.0377	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0851	JB	0.0589	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0635	JBQ	0.0322	MDL	4.98	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0564	JBQ	0.0505	MDL	4.98	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0771	JBQ	0.0712	MDL	0.996	PQL	ng/Kg	U	B
OCDD	2.95	JB	0.0537	MDL	9.96	PQL	ng/Kg	U	B
OCDF	0.390	JBQ	0.0790	MDL	9.96	PQL	ng/Kg	U	B

Sample ID: SL-509-NBZ-SB-2.5-3.5

Collected: 12/3/2013 1:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.526	JB	0.0719	MDL	5.18	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.192	JB	0.0466	MDL	5.18	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.444	JBQ	0.0702	MDL	5.18	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0880	JBQ	0.0468	MDL	5.18	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.0618	JBQ	0.0383	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.114	JBQ	0.0503	MDL	5.18	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	5.18	U	0.0347	MDL	5.18	PQL	ng/Kg	UJ	FD
1,2,3,7,8,9-HXCDD	0.0645	JBQ	0.0452	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	5.18	U	0.0400	MDL	5.18	PQL	ng/Kg	UJ	FD
1,2,3,7,8-PECDD	5.18	U	0.0416	MDL	5.18	PQL	ng/Kg	UJ	FD
1,2,3,7,8-PECDF	0.0572	JBQ	0.0215	MDL	5.18	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	5.18	U	0.0342	MDL	5.18	PQL	ng/Kg	UJ	FD
2,3,4,7,8-PECDF	0.0346	JBQ	0.0217	MDL	5.18	PQL	ng/Kg	U	B
OCDD	2.21	JB	0.0442	MDL	10.4	PQL	ng/Kg	UJ	B, FD
OCDF	0.292	JBQ	0.0749	MDL	10.4	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

2/24/2014 9:54:23 AM

ADR version 1.7.0.207

Page 1 of 5



# Data Qualifier Summary

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PrepPH138

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-510-NBZ-SB-0.0-0.5

Collected: 12/3/2013 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	0.539	JBQ	0.0355	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.110	JBQ	0.0128	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0570	JBQ	0.0191	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0756	JB	0.0198	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0681	JBQ	0.0305	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0595	JBQ	0.0282	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0883	JBQ	0.0230	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0784	JQ	0.0373	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0446	JB	0.0199	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0301	JBQ	0.0192	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0316	JBQ	0.0192	MDL	5.17	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0636	JB	0.0589	MDL	1.03	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0810	JQ	0.0393	MDL	1.03	PQL	ng/Kg	J	Z
OCDD	3.04	JB	0.0301	MDL	10.3	PQL	ng/Kg	U	B
OCDF	0.280	JBQ	0.0360	MDL	10.3	PQL	ng/Kg	U	B

Sample ID: SL-510-NBZ-SB-4.0-5.0

Collected: 12/3/2013 2:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.283	JB	0.0327	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0670	JBQ	0.0123	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0591	JB	0.0176	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0542	JBQ	0.0317	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0598	JBQ	0.0249	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0635	JBQ	0.0356	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0810	JBQ	0.0280	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0805	JBQ	0.0229	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0507	JB	0.0237	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0357	JBQ	0.0214	MDL	5.31	PQL	ng/Kg	U	B
OCDD	1.28	JB	0.0333	MDL	10.6	PQL	ng/Kg	U	B
OCDF	0.242	JBQ	0.0413	MDL	10.6	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PrepPH138

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-809-NBZ-SB-2.5-3.5

Collected: 12/3/2013 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	0.235	JBQ	0.0319	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.0628	JBQ	0.0140	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0419	JBQ	0.0195	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0335	JBQ	0.0248	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDF	0.0616	JB	0.0223	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0613	JBQ	0.0260	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HxCDF	0.0491	JB	0.0205	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HxCDD	0.0623	JBQ	0.0242	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.0762	JBQ	0.0240	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.107	JQ	0.0340	MDL	5.17	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.0539	JBQ	0.0190	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0373	JB	0.0205	MDL	5.17	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0469	JBQ	0.0186	MDL	5.17	PQL	ng/Kg	U	B
OCDD	0.870	JBQ	0.0316	MDL	10.3	PQL	ng/Kg	UJ	B, FD
OCDF	0.278	JBQ	0.0334	MDL	10.3	PQL	ng/Kg	U	B

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-530-NBZ-SB-0.0-0.5

Collected: 12/3/2013 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
EFH (C30-C40)	4.2	J	4.1	MDL	10	PQL	mg/Kg	J	Z

Sample ID: SL-531-NBZ-SB-0.0-0.5

Collected: 12/3/2013 1:50:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	7.9	J	4.1	MDL	10	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

2/24/2014 9:54:23 AM

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# Data Qualifier Summary

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PrepPH138

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

**Sample ID:** SL-533-NBZ-SB-0.0-0.5

**Collected:** 12/3/2013 1:05:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	2.8	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z
EFH (C30-C40)	6.4	J	4.1	MDL	10	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

**Sample ID:** SL-503-NBZ-SB-0.0-0.5

**Collected:** 12/3/2013 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
4,4'-DDT	0.37	J	0.36	MDL	1.7	PQL	ug/Kg	J	Z

**Sample ID:** SL-532-NBZ-SB-0.0-0.5

**Collected:** 12/3/2013 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
4,4'-DDT	1.0	J	0.36	MDL	1.7	PQL	ug/Kg	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** AQ

**Sample ID:** EB-120313

**Collected:** 12/3/2013 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
BENZO(B)FLUORANTHENE	0.012	J	0.010	MDL	0.050	PQL	ug/L	J	Z
BENZO(K)FLUORANTHENE	0.011	J	0.010	MDL	0.050	PQL	ug/L	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	0.13	J	0.050	MDL	1.0	PQL	ug/L	UJ	L, E, B
Diethylphthalate	0.49	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.18	J	0.050	MDL	1.0	PQL	ug/L	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PrepPH138

eQAPP Name: CDM\_SSFL\_140113\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
B	Method Blank Contamination
E	Laboratory Control Precision
E	Matrix Spike Precision
FD	Field Duplicate Precision
L	Laboratory Control Precision
L	Laboratory Control Spike Upper Estimation
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

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH138



# Method Blank Outlier Report

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PH138\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3460B370005	12/14/2013 12:05:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD OCDD OCDF	0.296 ng/Kg 0.121 ng/Kg 0.413 ng/Kg 0.0405 ng/Kg 0.0878 ng/Kg 0.0758 ng/Kg 0.0448 ng/Kg 0.0456 ng/Kg 0.0998 ng/Kg 0.0841 ng/Kg 0.0919 ng/Kg 0.0874 ng/Kg 0.116 ng/Kg 0.976 ng/Kg 0.225 ng/Kg	SL-509-NBZ-SB-0.0-0.5 SL-509-NBZ-SB-2.5-3.5 SL-510-NBZ-SB-0.0-0.5 SL-510-NBZ-SB-4.0-5.0 SL-809-NBZ-SB-2.5-3.5

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

Sample ID	Analyte	Reported Result	Modified Final Result
SL-509-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	0.626 ng/Kg	0.626U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.196 ng/Kg	0.196U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.155 ng/Kg	0.155U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.0801 ng/Kg	0.0801U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.139 ng/Kg	0.139U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.0603 ng/Kg	0.0603U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.0851 ng/Kg	0.0851U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0635 ng/Kg	0.0635U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.0564 ng/Kg	0.0564U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0771 ng/Kg	0.0771U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	OCDD	2.95 ng/Kg	2.95U ng/Kg
SL-509-NBZ-SB-0.0-0.5(RES)	OCDF	0.390 ng/Kg	0.390U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.526 ng/Kg	0.526U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.192 ng/Kg	0.192U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.444 ng/Kg	0.444U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDD	0.0880 ng/Kg	0.0880U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDF	0.0618 ng/Kg	0.0618U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	1,2,3,6,7,8-HxCDD	0.114 ng/Kg	0.114U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8,9-HxCDD	0.0645 ng/Kg	0.0645U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0572 ng/Kg	0.0572U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0346 ng/Kg	0.0346U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	OCDD	2.21 ng/Kg	2.21U ng/Kg
SL-509-NBZ-SB-2.5-3.5(RES)	OCDF	0.292 ng/Kg	0.292U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	0.539 ng/Kg	0.539U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.110 ng/Kg	0.110U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0570 ng/Kg	0.0570U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.0756 ng/Kg	0.0756U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.0681 ng/Kg	0.0681U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.0595 ng/Kg	0.0595U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PH138\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
SL-510-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0883 ng/Kg	0.0883U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0446 ng/Kg	0.0446U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0301 ng/Kg	0.0301U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0316 ng/Kg	0.0316U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0636 ng/Kg	0.0636U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	OCDD	3.04 ng/Kg	3.04U ng/Kg
SL-510-NBZ-SB-0.0-0.5(RES)	OCDF	0.280 ng/Kg	0.280U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.283 ng/Kg	0.283U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0670 ng/Kg	0.0670U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0591 ng/Kg	0.0591U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0542 ng/Kg	0.0542U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0598 ng/Kg	0.0598U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	1,2,3,6,7,8-HxCDD	0.0635 ng/Kg	0.0635U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0810 ng/Kg	0.0810U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0805 ng/Kg	0.0805U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0507 ng/Kg	0.0507U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0357 ng/Kg	0.0357U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	OCDD	1.28 ng/Kg	1.28U ng/Kg
SL-510-NBZ-SB-4.0-5.0(RES)	OCDF	0.242 ng/Kg	0.242U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.235 ng/Kg	0.235U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0628 ng/Kg	0.0628U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0419 ng/Kg	0.0419U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDD	0.0335 ng/Kg	0.0335U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0616 ng/Kg	0.0616U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,6,7,8-HxCDD	0.0613 ng/Kg	0.0613U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0491 ng/Kg	0.0491U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8,9-HxCDD	0.0623 ng/Kg	0.0623U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0762 ng/Kg	0.0762U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0539 ng/Kg	0.0539U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0373 ng/Kg	0.0373U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0469 ng/Kg	0.0469U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	OCDD	0.870 ng/Kg	0.870U ng/Kg
SL-809-NBZ-SB-2.5-3.5(RES)	OCDF	0.278 ng/Kg	0.278U ng/Kg

**Method:** 8270D SIM  
**Matrix:** AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI34B261515	12/10/2013 3:15:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	0.079 ug/L	EB-120313

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PH138\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 8270D SIM

**Matrix:** AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The 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-120313(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.13 ug/L	1.0U ug/L



# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PH138\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-504-NBZ-SB-0.0-0.5MS	EFH (C15-C20)	155	-	49.00-123.00	30 (20.00)	EFH (C15-C20)	J (all detects)
SL-504-NBZ-SB-0.0-0.5MSD	EFH (C21-C30)	343	-	49.00-123.00	102 (20.00)	EFH (C21-C30)	
(SL-504-NBZ-SB-0.0-0.5)	EFH (C30-C40)	559	-	49.00-123.00	138 (20.00)	EFH (C30-C40)	



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PH138\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8270D SIM

Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WILCSQ261542 P0WILCSY261609 (EB-120313)	BIS(2-ETHYLHEXYL)PHTHALAT	238	-	70.00-143.00	74 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects) UJ(all non-detects)

Method: 8151A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P33454AQ242143A (SL-533-NBZ-SB-0.0-0.5)	2,4-D 2,4-DB	136 135	- -	59.00-122.00 54.00-131.00	- -	2,4-D 2,4-DB	J (all detects)

Method: 8270D SIM

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P4LDLCSQ260542 (SL-509-NBZ-SB-0.0-0.5 SL-509-NBZ-SB-2.5-3.5 SL-510-NBZ-SB-0.0-0.5 SL-510-NBZ-SB-4.0-5.0 SL-809-NBZ-SB-2.5-3.5)	PYRENE	115	-	79.00-112.00	-	PYRENE	J(all detects)



# Field Duplicate RPD Report

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PH138\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 160.3M

Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-504-NBZ-SB-0.0-0.5	SL-804-NBZ-SB-0.0-0.5			
MOISTURE	2.2	1.9	15		No Qualifiers Applied

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-509-NBZ-SB-2.5-3.5	SL-809-NBZ-SB-2.5-3.5			
MOISTURE	4.5	5.4	18		No Qualifiers Applied

Method: 1613B

Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-509-NBZ-SB-2.5-3.5	SL-809-NBZ-SB-2.5-3.5			
1,2,3,4,7,8-HxCDF	0.0618	0.0616	0	50.00	No Qualifiers Applied
1,2,3,7,8,9-HxCDD	0.0645	0.0623	3	50.00	
1,2,3,7,8-PECDF	0.0572	0.0539	6	50.00	
2,3,4,7,8-PECDF	0.0346	0.0469	30	50.00	
OCDF	0.292	0.278	5	50.00	
1,2,3,4,6,7,8-HPCDD	0.526	0.235	76	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,6,7,8-HPCDF	0.192	0.0628	101	50.00	
1,2,3,4,7,8,9-HPCDF	0.444	0.0419	166	50.00	
1,2,3,4,7,8-HxCDD	0.0880	0.0335	90	50.00	
1,2,3,6,7,8-HxCDD	0.114	0.0613	60	50.00	
1,2,3,6,7,8-HxCDF	5.18 U	0.0491	200	50.00	
1,2,3,7,8,9-HxCDF	5.18 U	0.0762	200	50.00	
1,2,3,7,8-PECDD	5.18 U	0.107	200	50.00	
2,3,4,6,7,8-HxCDF	5.18 U	0.0373	200	50.00	
OCDD	2.21	0.870	87	50.00	

Method: 9045M

Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-509-NBZ-SB-2.5-3.5	SL-809-NBZ-SB-2.5-3.5			
PH	7.60	7.65	1	50.00	No Qualifiers Applied



# Reporting Limit Outliers

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PH138\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8270D SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB-120313	BENZO(B)FLUORANTHENE	J	0.012	0.050	PQL	ug/L	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.011	0.050	PQL	ug/L	
	BIS(2-ETHYLHEXYL)PHthalate	J	0.13	1.0	PQL	ug/L	
	Diethylphthalate	J	0.49	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.18	1.0	PQL	ug/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-509-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.626	4.98	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.196	4.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.155	4.98	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.831	4.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0801	4.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.139	4.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0603	4.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0851	4.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0635	4.98	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0564	4.98	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0771	0.996	PQL	ng/Kg	
	OCDD	JB	2.95	9.96	PQL	ng/Kg	
	OCDF	JBQ	0.390	9.96	PQL	ng/Kg	
SL-509-NBZ-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.526	5.18	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.192	5.18	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.444	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0880	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0618	5.18	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.114	5.18	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0645	5.18	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0572	5.18	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0346	5.18	PQL	ng/Kg	
	OCDD	JB	2.21	10.4	PQL	ng/Kg	
	OCDF	JBQ	0.292	10.4	PQL	ng/Kg	
SL-510-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.539	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.110	5.17	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0570	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0756	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0681	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0595	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0883	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.0784	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0446	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0301	5.17	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0316	5.17	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0636	1.03	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0810	1.03	PQL	ng/Kg	
	OCDD	JB	3.04	10.3	PQL	ng/Kg	
	OCDF	JBQ	0.280	10.3	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH138

Laboratory: LL

EDD Filename: PH138\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-510-NBZ-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.283	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0670	5.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0591	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0542	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0598	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.0635	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0810	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0805	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0507	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0357	5.31	PQL	ng/Kg	
	OCDD	JB	1.28	10.6	PQL	ng/Kg	
	OCDF	JBQ	0.242	10.6	PQL	ng/Kg	
SL-809-NBZ-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.235	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0628	5.17	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0419	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0335	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.0616	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.0613	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.0491	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0623	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0762	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.107	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0539	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0373	5.17	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0469	5.17	PQL	ng/Kg	
	OCDD	JBQ	0.870	10.3	PQL	ng/Kg	
	OCDF	JBQ	0.278	10.3	PQL	ng/Kg	

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-530-NBZ-SB-0.0-0.5	EFH (C30-C40)	J	4.2	10	PQL	mg/Kg	J (all detects)
SL-531-NBZ-SB-0.0-0.5	EFH (C30-C40)	J	7.9	10	PQL	mg/Kg	J (all detects)
SL-533-NBZ-SB-0.0-0.5	EFH (C21-C30)	J	2.8	5.1	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	6.4	10	PQL	mg/Kg	

Method: 8081B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-503-NBZ-SB-0.0-0.5	4,4'-DDT	J	0.37	1.7	PQL	ug/Kg	J (all detects)
SL-532-NBZ-SB-0.0-0.5	4,4'-DDT	J	1.0	1.7	PQL	ug/Kg	J (all detects)



**Data Validation Report  
Santa Susana Field Laboratory**

**Subarea NBZ**

**SDG: PH139**

Prepared for

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February 21, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level IV data validation results for samples collected on December 4, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) 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 (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)

Pesticides by EPA SW 846 Method 8081B

Polychlorinated Biphenyls (PCBs) by EPA SW 846 Method 8082A

Metals by EPA SW 846 Method 6010C, 6020A and 7471B

Total Petroleum Hydrocarbons (TPH) as Gasoline by EPA SW 846 Method 8015M

TPH as Extractables by EPA SW 846 Method 8015M

Dioxins and Dibenzofurans by EPA Method 1613B

Wet Chemistry:

Cyanide by EPA SW 846 Method 9012B

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment II. Level III Automated Data Review outliers are presented in Enclosure I. Level IV DVRs are presented in Enclosure II.

All sample results were subjected to Level IV data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards, interference check (ICSA and ICSAB) samples, matrix spike/matrix spike duplicates (MS/MSD), laboratory duplicates (DUP), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), ICP serial dilutions, method blanks, trip blanks, equipment blanks, field blanks, field duplicate samples, and the raw data to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the initial and continuing calibrations, ICB/CCBs, interference check samples, internal standards (except dioxins), and ICP serial dilutions, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

All criteria for the initial calibration of each method were met.

## **III. Continuing Calibration**

All criteria for the initial calibration verifications and continuing calibration of each method were met.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of two blanks for metals and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosures I and II.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the exception of several metals. The associated sample results were qualified as non-detected (U) due to initial or continuing calibration blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure II.

## **V. Surrogate Spikes**

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

## **VI. ICP Interference Check Sample (ICS) Analysis**

The frequency of analysis was met.

The criteria for analysis were met.

## **VII. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed at the required frequency. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one MS/MSD pair for metals. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The details regarding the qualification of data are provided in Enclosures I and II.



## **VIII. Laboratory Duplicates Sample**

Laboratory duplicates (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## **.IX. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one LCS/LCSD pair for SVOCs. The associated sample results were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosures I and II.

## **X. Internal Standards**

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

## **XI. ICP Serial Dilution**

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

## **XII. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag
All samples in SDG PH139	All compounds reported as detected below the RL.	J (all detects)

## **XIII. Field Duplicate Samples**

One field duplicate pair was collected and analyzed for SVOCs, PCBs, metals, TPH as extractables, dioxins and cyanide. All RPDs were within QC limits with the exception of SVOCs, metals and dioxins. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The field duplicate result comparisons are provided in Enclosures I and II.

## **XIV. Field Blank Samples**

One trip blank was collected and analyzed for TPH as gasoline. No volatile contaminants were found in the trip blank.

Three equipment blanks (from SDG PH140) were collected and analyzed for SVOCs, pesticides, PCBs, metals, TPH as extractables, dioxins and cyanide. The equipment blank had detections for SVOCs, metals and dioxins. The associated sample results were not detected or were significantly greater than the concentrations found in the equipment blanks, therefore no data were qualified. The details are provided in Enclosure II.



One field blank (from SDG PH032) was collected and analyzed for SVOCs, pesticides, PCBs, metals, TPH as gasoline, TPH as extractables, dioxins and cyanide. The field blank had detections for SVOCs, metals and dioxins. The associated sample results were qualified as non-detected (U) due to field blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the field blank were not qualified. The field blank outlier reports are presented in Enclosures I and II.

## **XV. Overall Assessment of Data**

No data associated with this sampling event were rejected. The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. All data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



## **Attachment 1**

### **Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Dec-2013	TB-120413	7301925	TB	5030B	8015M	IV
04-Dec-2013	SL-549-NBZ-SB-0.0-0.5	7301924	N	3546	8015M	IV
04-Dec-2013	SL-508-NBZ-SB-0.0-0.5	7301920	N	3546	8015M	IV
04-Dec-2013	SL-508-NBZ-SB-0.0-0.5	7301920	N	3546	8081B	IV
04-Dec-2013	SL-508-NBZ-SB-0.0-0.5	7301920	N	3546	8082A	IV
04-Dec-2013	SL-508-NBZ-SB-0.0-0.5	7301920	N	3546	8270D SIM	IV
04-Dec-2013	SL-508-NBZ-SB-0.0-0.5	7301920	N	METHOD	1613B	IV
04-Dec-2013	SL-508-NBZ-SB-4.0-5.0	7301921	N	3546	8015M	IV
04-Dec-2013	SL-508-NBZ-SB-4.0-5.0	7301921	N	3546	8081B	IV
04-Dec-2013	SL-508-NBZ-SB-4.0-5.0	7301921	N	3546	8082A	IV
04-Dec-2013	SL-508-NBZ-SB-4.0-5.0	7301921	N	3546	8270D SIM	IV
04-Dec-2013	SL-508-NBZ-SB-4.0-5.0	7301921	N	5035A	8015M	IV
04-Dec-2013	SL-508-NBZ-SB-4.0-5.0	7301921	N	METHOD	1613B	IV
04-Dec-2013	SL-546-NBZ-SB-0.0-0.5	7301922	N	3546	8015M	IV
04-Dec-2013	SL-507-NBZ-SB-0.0-0.5	7301918	N	3546	8015M	IV
04-Dec-2013	SL-507-NBZ-SB-0.0-0.5	7301918	N	3546	8081B	IV
04-Dec-2013	SL-507-NBZ-SB-3.5-4.5	7301919	N	3546	8015M	IV
04-Dec-2013	SL-507-NBZ-SB-3.5-4.5	7301919	N	3546	8081B	IV
04-Dec-2013	SL-507-NBZ-SB-3.5-4.5	7301919	N	5035A	8015M	IV
04-Dec-2013	SL-506-NBZ-SB-0.0-0.5	7301917	N	3546	8015M	IV
04-Dec-2013	SL-506-NBZ-SB-0.0-0.5	7301917	N	3546	8081B	IV
04-Dec-2013	SL-547-NBZ-SB-0.0-0.5	7301923	N	3546	8015M	IV
04-Dec-2013	SL-511-NBZ-SB-0.0-0.5	7301931	N	3050B	6010C	IV
04-Dec-2013	SL-511-NBZ-SB-0.0-0.5	7301931	N	3050B	6020A	IV
04-Dec-2013	SL-511-NBZ-SB-0.0-0.5	7301931	N	3546	8015M	IV
04-Dec-2013	SL-511-NBZ-SB-0.0-0.5	7301931	N	3546	8270D SIM	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-2013	SL-511-NBZ-SB-0.0-0.5	7301931	N	METHOD	1613B	IV
04-Dec-2013	SL-511-NBZ-SB-0.0-0.5	7301931	N	METHOD	7471B	IV
04-Dec-2013	SL-511-NBZ-SB-2.5-3.5	7301932	N	3050B	6010C	IV
04-Dec-2013	SL-511-NBZ-SB-2.5-3.5	7301932	N	3050B	6020A	IV
04-Dec-2013	SL-511-NBZ-SB-2.5-3.5	7301932	N	3546	8015M	IV
04-Dec-2013	SL-511-NBZ-SB-2.5-3.5	7301932	N	3546	8270D SIM	IV
04-Dec-2013	SL-511-NBZ-SB-2.5-3.5	7301932	N	5035A	8015M	IV
04-Dec-2013	SL-511-NBZ-SB-2.5-3.5	7301932	N	METHOD	1613B	IV
04-Dec-2013	SL-511-NBZ-SB-2.5-3.5	7301932	N	METHOD	7471B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5	7301926	N	3050B	6010C	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5	7301926	N	3050B	6020A	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5	7301926	N	3546	8015M	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5	7301926	N	3546	8082A	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5	7301926	N	3546	8270D SIM	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5	7301926	N	METHOD	1613B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5	7301926	N	METHOD	7471B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5	7301926	N	METHOD	9012B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MS	7301927	MS	3050B	6010C	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MS	7301927	MS	3050B	6020A	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MS	7301927	MS	3546	8015M	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MS	7301927	MS	3546	8082A	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MS	7301927	MS	3546	8270D SIM	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MS	7301927	MS	METHOD	1613B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MS	7301927	MS	METHOD	7471B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MS	7301927	MS	METHOD	9012B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MSD	7301928	MSD	3050B	6010C	IV



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MSD	7301928	MSD	3050B	6020A	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MSD	7301928	MSD	3546	8015M	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MSD	7301928	MSD	3546	8082A	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MSD	7301928	MSD	3546	8270D SIM	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MSD	7301928	MSD	METHOD	1613B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5MSD	7301928	MSD	METHOD	7471B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5DUP	7301929	DUP	3050B	6010C	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5DUP	7301929	DUP	3050B	6020A	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5DUP	7301929	DUP	METHOD	7471B	IV
04-Dec-2013	SL-545-NBZ-SB-0.0-0.5DUP	7301929	DUP	METHOD	9012B	IV
04-Dec-2013	SL-845-NBZ-SB-0.0-0.5	7301930	FD	3050B	6010C	IV
04-Dec-2013	SL-845-NBZ-SB-0.0-0.5	7301930	FD	3050B	6020A	IV
04-Dec-2013	SL-845-NBZ-SB-0.0-0.5	7301930	FD	3546	8015M	IV
04-Dec-2013	SL-845-NBZ-SB-0.0-0.5	7301930	FD	3546	8082A	IV
04-Dec-2013	SL-845-NBZ-SB-0.0-0.5	7301930	FD	3546	8270D SIM	IV
04-Dec-2013	SL-845-NBZ-SB-0.0-0.5	7301930	FD	METHOD	1613B	IV
04-Dec-2013	SL-845-NBZ-SB-0.0-0.5	7301930	FD	METHOD	7471B	IV
04-Dec-2013	SL-845-NBZ-SB-0.0-0.5	7301930	FD	METHOD	9012B	IV
04-Dec-2013	SL-548-NBZ-SB-0.0-0.5	7301933	N	3546	8015M	IV
04-Dec-2013	SL-548-NBZ-SB-0.0-0.5	7301933	N	3546	8082A	IV
04-Dec-2013	SL-548-NBZ-SB-0.0-0.5	7301933	N	METHOD	1613B	IV



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-511-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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
ANTIMONY	4.18	U	0.772	MDL	4.18	PQL	mg/Kg	UJ	Q
BERYLLIUM	0.950	J	0.0699	MDL	1.04	PQL	mg/Kg	J	Z
CADMIUM	0.489	J	0.0793	MDL	1.04	PQL	mg/Kg	J	Z
SODIUM	99.6	J	17.4	MDL	104	PQL	mg/Kg	J	Z
TIN	3.49	J	0.230	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.877	MDL	5.22	PQL	mg/Kg	J	Z
MOLYBDENUM	0.396	J	0.177	MDL	2.09	PQL	mg/Kg	U	B, F

Sample ID: SL-511-NBZ-SB-2.5-3.5

Collected: 12/4/2013 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
ANTIMONY	4.09	U	0.757	MDL	4.09	PQL	mg/Kg	UJ	Q
CADMIUM	0.354	J	0.0778	MDL	1.02	PQL	mg/Kg	J	Z
MOLYBDENUM	0.630	J	0.174	MDL	2.05	PQL	mg/Kg	U	B, F
TIN	3.68	J	0.225	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.34	J	0.859	MDL	5.12	PQL	mg/Kg	J	Z

Sample ID: SL-545-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	4.24	U	0.784	MDL	4.24	PQL	mg/Kg	UJ	Q
ARSENIC	3.24	J	0.742	MDL	4.24	PQL	mg/Kg	J	Z
BERYLLIUM	0.477	J	0.0710	MDL	1.06	PQL	mg/Kg	J	Z
BORON	4.79	J	0.890	MDL	10.6	PQL	mg/Kg	J	Z
CADMIUM	0.447	J	0.0806	MDL	1.06	PQL	mg/Kg	J	Z
MOLYBDENUM	0.998	J	0.180	MDL	2.12	PQL	mg/Kg	UJ	FD, B, F
SODIUM	78.3	J	17.7	MDL	106	PQL	mg/Kg	J	Z
TIN	2.85	J	0.233	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.66	J	0.890	MDL	5.30	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-845-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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
ANTIMONY	4.15	U	0.769	MDL	4.15	PQL	mg/Kg	UJ	Q
ARSENIC	2.90	J	0.727	MDL	4.15	PQL	mg/Kg	J	Z
BERYLLIUM	0.466	J	0.0696	MDL	1.04	PQL	mg/Kg	J	Z
BORON	5.57	J	0.872	MDL	10.4	PQL	mg/Kg	J	Z
CADMIUM	0.466	J	0.0789	MDL	1.04	PQL	mg/Kg	J	Z
MOLYBDENUM	0.561	J	0.177	MDL	2.08	PQL	mg/Kg	UJ	FD, B, F
SODIUM	92.1	J	17.3	MDL	104	PQL	mg/Kg	J	Z
TIN	2.85	J	0.228	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.00	J	0.872	MDL	5.19	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-511-NBZ-SB-0.0-0.5

Collected: 12/4/2013 12:40:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.402	J	0.104	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-511-NBZ-SB-0.0-0.5

Collected: 12/4/2013 12:40:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0824	J	0.0271	MDL	0.209	PQL	mg/Kg	J	Z
STRONTIUM	31.0		0.0710	MDL	0.418	PQL	mg/Kg	J	Q

Sample ID: SL-511-NBZ-SB-2.5-3.5

Collected: 12/4/2013 1:00:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.402	J	0.102	MDL	0.409	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-511-NBZ-SB-2.5-3.5

Collected: 12/4/2013 1:00:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0769	J	0.0266	MDL	0.205	PQL	mg/Kg	J	Z
STRONTIUM	23.3		0.0696	MDL	0.409	PQL	mg/Kg	J	Q

Sample ID: SL-545-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:25:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.203	J	0.106	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-545-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:25:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.201	J	0.0276	MDL	0.212	PQL	mg/Kg	J	Z
STRONTIUM	25.3		0.0721	MDL	0.424	PQL	mg/Kg	J	Q

Sample ID: SL-845-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:30:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.189	J	0.104	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: SL-845-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:30:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	29.2		0.0706	MDL	0.415	PQL	mg/Kg	J	Q
THALLIUM	0.204	J	0.0312	MDL	0.208	PQL	mg/Kg	U	B

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

Sample ID: SL-511-NBZ-SB-2.5-3.5

Collected: 12/4/2013 1:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0140	J	0.0103	MDL	0.0171	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-508-NBZ-SB-0.0-0.5

Collected: 12/4/2013 9:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.120	JB	0.0333	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.119	JB	0.0187	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.106	JB	0.0241	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0429	JBQ	0.0343	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.0919	JBQ	0.0381	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0747	JBQ	0.0359	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.0630	JB	0.0344	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0602	JBQ	0.0334	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.126	JBQ	0.0372	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.107	JB	0.0348	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0919	JB	0.0338	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.131	JBQ	0.0313	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.112	JBQ	0.0791	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.122	JBQ	0.0868	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.486	JB	0.0398	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.328	JB	0.0639	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-508-NBZ-SB-4.0-5.0

Collected: 12/4/2013 9:15:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.186	JBQ	0.0341	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.101	JBQ	0.0186	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0765	JBQ	0.0236	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.0401	JBQ	0.0369	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0656	JB	0.0397	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0377	JBQ	0.0360	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.114	JBQ	0.0373	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0722	JBQ	0.0333	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0565	JBQ	0.0328	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0629	JBQ	0.0307	MDL	5.50	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.107	JBQ	0.0753	MDL	1.10	PQL	ng/Kg	U	B
OCDD	1.22	JB	0.0432	MDL	11.0	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-508-NBZ-SB-4.0-5.0

Collected: 12/4/2013 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
OCDF	0.322	JB	0.0597	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-511-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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-HPCDD	2.23	JB	0.0357	MDL	5.01	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.569	JB	0.0241	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0983	JBQ	0.0307	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0648	JB	0.0469	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.165	JB	0.0438	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.300	JB	0.0497	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.150	JB	0.0407	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.263	JBQ	0.0446	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.152	JBQ	0.0455	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0866	JBQ	0.0395	MDL	5.01	PQL	ng/Kg	U	B
1,2,3,7,8-PCDF	0.169	JBQ	0.0331	MDL	5.01	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.176	JB	0.0424	MDL	5.01	PQL	ng/Kg	U	B
2,3,4,7,8-PCDF	0.377	JB	0.0319	MDL	5.01	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.325	JBQ	0.0747	MDL	1.00	PQL	ng/Kg	U	B
OCDF	0.821	JBQ	0.0494	MDL	10.0	PQL	ng/Kg	U	B

Sample ID: SL-511-NBZ-SB-2.5-3.5

Collected: 12/4/2013 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	0.196	JB	0.0275	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.105	JB	0.0129	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0526	JBQ	0.0173	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0507	JBQ	0.0270	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.112	JB	0.0240	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.114	JBQ	0.0280	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.0967	JB	0.0233	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.144	JB	0.0271	MDL	5.07	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-511-NBZ-SB-2.5-3.5

Collected: 12/4/2013 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	0.123	JBQ	0.0229	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.157	JBQ	0.0355	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.203	JB	0.0272	MDL	5.07	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0897	JBQ	0.0228	MDL	5.07	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.186	JBQ	0.0251	MDL	5.07	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.147	JBQ	0.0573	MDL	1.01	PQL	ng/Kg	U	B
OCDD	0.809	JB	0.0377	MDL	10.1	PQL	ng/Kg	U	B
OCDF	0.217	JBQ	0.0458	MDL	10.1	PQL	ng/Kg	U	B

Sample ID: SL-545-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.75	JB	0.0398	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.363	JBQ	0.0488	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.441	JB	0.0592	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.466	JB	0.0550	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.04	JB	0.0604	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.470	JB	0.0548	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.790	JB	0.0584	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.206	JB	0.0516	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.269	JBQ	0.0631	MDL	5.17	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.878	JB	0.0517	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.462	JB	0.0505	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.889	JB	0.0492	MDL	5.17	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0707	JB	0.0480	MDL	1.03	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.622	JBQ	0.0922	MDL	1.03	PQL	ng/Kg	J	Z
OCDF	8.97	JB	0.0378	MDL	10.3	PQL	ng/Kg	J	Z

Sample ID: SL-548-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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	0.137	JB	0.0275	MDL	4.97	PQL	ng/Kg	U	B

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method Category: SVOA

Method: 1613B

Matrix: SO

Sample ID: SL-548-NBZ-SB-0.0-0.5

Collected: 12/4/2013 2:15:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.109	JB	0.0152	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0269	JBQ	0.0196	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0513	JBQ	0.0254	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.103	JBQ	0.0279	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0726	JBQ	0.0269	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.102	JBQ	0.0260	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0822	JBQ	0.0251	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0965	JB	0.0281	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.194	JBQ	0.0385	MDL	4.97	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.249	JB	0.0262	MDL	4.97	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0735	JBQ	0.0259	MDL	4.97	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.202	JBQ	0.0245	MDL	4.97	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.115	JBQ	0.0572	MDL	0.994	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.123	JBQ	0.0553	MDL	0.994	PQL	ng/Kg	U	B
OCDD	0.438	JB	0.0394	MDL	9.94	PQL	ng/Kg	U	B
OCDF	0.180	JBQ	0.0491	MDL	9.94	PQL	ng/Kg	U	B

Sample ID: SL-845-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.26	JB	0.0356	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.597	JB	0.0434	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.589	JB	0.0632	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.660	JBQ	0.0565	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	1.10	JB	0.0678	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.682	JB	0.0536	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.926	JB	0.0612	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.466	JB	0.0558	MDL	5.27	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.688	JBQ	0.0711	MDL	5.27	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	1.13	JB	0.0494	MDL	5.27	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.727	JB	0.0503	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.995	JB	0.0468	MDL	5.27	PQL	ng/Kg	U	B

\* denotes a non-reportable result

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## Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-845-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0848	JBQ	0.0552	MDL	1.05	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.487	JBQ	0.0849	MDL	1.05	PQL	ng/Kg	J	Z
OCDF	8.17	JB	0.0445	MDL	10.5	PQL	ng/Kg	J	Z

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-506-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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 (C21-C30)	4.3	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z

Sample ID: SL-507-NBZ-SB-3.5-4.5

Collected: 12/4/2013 10:15:00

Analysis Type: REA

Dilution: 24.18

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.6	J	0.2	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-507-NBZ-SB-3.5-4.5

Collected: 12/4/2013 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 (C21-C30)	3.3	J	2.1	MDL	5.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	8.3	J	4.3	MDL	11	PQL	mg/Kg	J	Z

Sample ID: SL-508-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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
EFH (C21-C30)	3.2	J	2.2	MDL	5.5	PQL	mg/Kg	J	Z
EFH (C30-C40)	7.9	J	4.4	MDL	11	PQL	mg/Kg	J	Z

Sample ID: SL-508-NBZ-SB-4.0-5.0

Collected: 12/4/2013 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 (C21-C30)	3.2	J	2.2	MDL	5.5	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

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## Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-508-NBZ-SB-4.0-5.0

Collected: 12/4/2013 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)	8.2	J	4.4	MDL	11	PQL	mg/Kg	J	Z

Sample ID: SL-511-NBZ-SB-2.5-3.5

Collected: 12/4/2013 1:00:00

Analysis Type: REA

Dilution: 26.32

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.3	J	0.2	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-511-NBZ-SB-2.5-3.5

Collected: 12/4/2013 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)	3.5	J	2.1	MDL	5.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	8.9	J	4.2	MDL	11	PQL	mg/Kg	J	Z

Sample ID: SL-546-NBZ-SB-0.0-0.5

Collected: 12/4/2013 9:55:00

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)	11	J	10	MDL	26	PQL	mg/Kg	J	Z

Sample ID: SL-547-NBZ-SB-0.0-0.5

Collected: 12/4/2013 10:45:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	10	J	4.2	MDL	11	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-507-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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
4,4'-DDE	0.63	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z
4,4'-DDT	0.43	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-508-NBZ-SB-0.0-0.5

Collected: 12/4/2013 9:00:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-508-NBZ-SB-4.0-5.0

Collected: 12/4/2013 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
CHRYSENE	0.48	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-511-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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-METHYLNAPHTHALENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-511-NBZ-SB-0.0-0.5

Collected: 12/4/2013 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
BENZO(K)FLUORANTHENE	0.71	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.70	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-545-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:25:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	15	J	7.2	MDL	18	PQL	ug/Kg	J	Z, FD
CHRYSENE	20		3.6	MDL	18	PQL	ug/Kg	J	FD
NAPHTHALENE	12	J	7.2	MDL	18	PQL	ug/Kg	J	Z, FD

Sample ID: SL-845-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:30:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	18	U	7.1	MDL	18	PQL	ug/Kg	UJ	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-845-NBZ-SB-0.0-0.5

Collected: 12/4/2013 1:30:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	6.9	J	3.5	MDL	18	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	18	U	7.1	MDL	18	PQL	ug/Kg	UJ	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
B	Calibration Blank Contamination
B	Method Blank Contamination
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Field Blank Contamination
FD	Field Duplicate Precision
L	Laboratory Control Spike Upper Estimation
Q	Laboratory 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
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers  
(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH139



# Method Blank Outlier Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3470B371822	12/16/2013 6:22:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	0.255 ng/Kg 0.219 ng/Kg 0.237 ng/Kg 0.164 ng/Kg 0.187 ng/Kg 0.174 ng/Kg 0.183 ng/Kg 0.220 ng/Kg 0.333 ng/Kg 0.186 ng/Kg 0.219 ng/Kg 0.271 ng/Kg 0.287 ng/Kg 0.0842 ng/Kg 0.0670 ng/Kg 0.606 ng/Kg 0.588 ng/Kg	SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5 SL-545-NBZ-SB-0.0-0.5 SL-548-NBZ-SB-0.0-0.5 SL-845-NBZ-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-508-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPQDD	0.120 ng/Kg	0.120U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.119 ng/Kg	0.119U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.106 ng/Kg	0.106U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0429 ng/Kg	0.0429U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.0919 ng/Kg	0.0919U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.0747 ng/Kg	0.0747U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.0630 ng/Kg	0.0630U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.0602 ng/Kg	0.0602U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.126 ng/Kg	0.126U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.107 ng/Kg	0.107U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.0919 ng/Kg	0.0919U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.131 ng/Kg	0.131U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.112 ng/Kg	0.112U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.122 ng/Kg	0.122U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	OCDD	0.486 ng/Kg	0.486U ng/Kg
SL-508-NBZ-SB-0.0-0.5(RES)	OCDF	0.328 ng/Kg	0.328U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.186 ng/Kg	0.186U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.101 ng/Kg	0.101U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0765 ng/Kg	0.0765U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDF	0.0401 ng/Kg	0.0401U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	1,2,3,6,7,8-HxCDD	0.0656 ng/Kg	0.0656U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	1,2,3,7,8,9-HxCDD	0.0377 ng/Kg	0.0377U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	1,2,3,7,8,9-HxCDF	0.114 ng/Kg	0.114U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0722 ng/Kg	0.0722U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	2,3,4,6,7,8-HxCDF	0.0565 ng/Kg	0.0565U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0629 ng/Kg	0.0629U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.107 ng/Kg	0.107U ng/Kg
SL-508-NBZ-SB-4.0-5.0(RES)	OCDD	1.22 ng/Kg	1.22U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B  
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
SL-508-NBZ-SB-4.0-5.0(RES)	OCDF	0.322 ng/Kg	0.322U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.569 ng/Kg	0.569U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0983 ng/Kg	0.0983U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0648 ng/Kg	0.0648U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.165 ng/Kg	0.165U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.300 ng/Kg	0.300U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.150 ng/Kg	0.150U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.263 ng/Kg	0.263U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.152 ng/Kg	0.152U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0866 ng/Kg	0.0866U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.169 ng/Kg	0.169U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.176 ng/Kg	0.176U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.377 ng/Kg	0.377U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.325 ng/Kg	0.325U ng/Kg
SL-511-NBZ-SB-0.0-0.5(RES)	OCDF	0.821 ng/Kg	0.821U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.196 ng/Kg	0.196U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.105 ng/Kg	0.105U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0526 ng/Kg	0.0526U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDD	0.0507 ng/Kg	0.0507U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDF	0.112 ng/Kg	0.112U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,6,7,8-HxCDD	0.114 ng/Kg	0.114U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,6,7,8-HxCDF	0.0967 ng/Kg	0.0967U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8,9-HxCDD	0.144 ng/Kg	0.144U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8,9-HxCDF	0.123 ng/Kg	0.123U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.157 ng/Kg	0.157U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.203 ng/Kg	0.203U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	2,3,4,6,7,8-HxCDF	0.0897 ng/Kg	0.0897U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.186 ng/Kg	0.186U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	2,3,7,8-TCDF	0.147 ng/Kg	0.147U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	OCDD	0.809 ng/Kg	0.809U ng/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	OCDF	0.217 ng/Kg	0.217U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.363 ng/Kg	0.363U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.441 ng/Kg	0.441U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.466 ng/Kg	0.466U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.470 ng/Kg	0.470U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.790 ng/Kg	0.790U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.206 ng/Kg	0.206U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.269 ng/Kg	0.269U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.878 ng/Kg	0.878U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.462 ng/Kg	0.462U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-545-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.889 ng/Kg	0.889U ng/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0707 ng/Kg	0.0707U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	0.137 ng/Kg	0.137U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.109 ng/Kg	0.109U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0269 ng/Kg	0.0269U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0513 ng/Kg	0.0513U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.103 ng/Kg	0.103U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.0726 ng/Kg	0.0726U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.102 ng/Kg	0.102U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.0822 ng/Kg	0.0822U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.0965 ng/Kg	0.0965U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PCDD	0.194 ng/Kg	0.194U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PCDF	0.249 ng/Kg	0.249U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.0735 ng/Kg	0.0735U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.202 ng/Kg	0.202U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.115 ng/Kg	0.115U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.123 ng/Kg	0.123U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	OCDD	0.438 ng/Kg	0.438U ng/Kg
SL-548-NBZ-SB-0.0-0.5(RES)	OCDF	0.180 ng/Kg	0.180U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.597 ng/Kg	0.597U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.589 ng/Kg	0.589U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.660 ng/Kg	0.660U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.682 ng/Kg	0.682U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.926 ng/Kg	0.926U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.466 ng/Kg	0.466U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PCDD	0.688 ng/Kg	0.688U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.727 ng/Kg	0.727U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.995 ng/Kg	0.995U ng/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0848 ng/Kg	0.0848U ng/Kg

Method: 6010C

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34737AB221738	12/16/2013 5:38:00 PM	CALCIUM MAGNESIUM TIN ZINC	4.84 mg/Kg 2.30 mg/Kg 1.63 mg/Kg 0.233 mg/Kg	SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
SL-511-NBZ-SB-0.0-0.5(RES)	TIN	3.49 mg/Kg	3.49U mg/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	TIN	3.68 mg/Kg	3.68U mg/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg



# Field Blank Outlier Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PrepPH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 6010C

**Matrix:** SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041613(REA2/TOT)	4/16/2013 3:15:00 PM	MOLYBDENUM TIN	0.0132 mg/L 0.0029 mg/L	SL-506-NBZ-SB-0.0-0.5 SL-507-NBZ-SB-0.0-0.5 SL-507-NBZ-SB-3.5-4.5 SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5 SL-545-NBZ-SB-0.0-0.5 SL-546-NBZ-SB-0.0-0.5 SL-547-NBZ-SB-0.0-0.5 SL-548-NBZ-SB-0.0-0.5 SL-549-NBZ-SB-0.0-0.5 SL-845-NBZ-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-511-NBZ-SB-0.0-0.5(RES)	MOLYBDENUM	0.396 mg/Kg	0.396U mg/Kg
SL-511-NBZ-SB-2.5-3.5(RES)	MOLYBDENUM	0.630 mg/Kg	0.630U mg/Kg
SL-545-NBZ-SB-0.0-0.5(RES)	MOLYBDENUM	0.998 mg/Kg	0.998U mg/Kg
SL-845-NBZ-SB-0.0-0.5(RES)	MOLYBDENUM	0.561 mg/Kg	0.561U mg/Kg



# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-545-NBZ-SB-0.0-0.5MS	EFH (C12-C14)	0	0	49.00-123.00	-	EFH (C12-C14)	No Qual, Diluted Out
SL-545-NBZ-SB-0.0-0.5MSD	EFH (C15-C20)	-98	-	49.00-123.00	38 (20.00)	EFH (C15-C20)	
(SL-545-NBZ-SB-0.0-0.5)	EFH (C21-C30)	-219	-79	49.00-123.00	-	EFH (C21-C30)	
	EFH (C30-C40)	-386	248	49.00-123.00	29 (20.00)	EFH (C30-C40)	
	EFH (C8-C11)	0	0	49.00-123.00	-	EFH (C8-C11)	

Method: 8270D SIM

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-545-NBZ-SB-0.0-0.5MS	BENZO(E)PYRENE	0	-	70.00-130.00	200 (30.00)	BENZO(E)PYRENE	No Qual, Diluted Out
SL-545-NBZ-SB-0.0-0.5MSD	BIS(2-ETHYLHEXYL)PHTHALAT	0	0	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
(SL-545-NBZ-SB-0.0-0.5)	Butylbenzylphthalate	0	0	49.00-151.00	-	Butylbenzylphthalate	
	Diethylphthalate	0	0	43.00-145.00	-	Diethylphthalate	
	Dimethylphthalate	0	0	58.00-129.00	-	Dimethylphthalate	
	Di-n-butylphthalate	0	0	52.00-147.00	-	Di-n-butylphthalate	
	Di-n-octylphthalate	0	0	52.00-162.00	-	Di-n-octylphthalate	

Method: 6010C

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-545-NBZ-SB-0.0-0.5MS	ALUMINUM	1409	1052	75.00-125.00	-	ALUMINUM	No Qual, >4x
(TOT)	CALCIUM	252	220	75.00-125.00	-	CALCIUM	
SL-545-NBZ-SB-0.0-0.5MSD	MAGNESIUM	233	129	75.00-125.00	-	MAGNESIUM	
(TOT)	MANGANESE	141	-	75.00-125.00	-	MANGANESE	
(SL-511-NBZ-SB-0.0-0.5	TITANIUM	293	271	75.00-125.00	-	TITANIUM	
SL-511-NBZ-SB-2.5-3.5							
SL-545-NBZ-SB-0.0-0.5							
SL-845-NBZ-SB-0.0-0.5)							
SL-545-NBZ-SB-0.0-0.5MS	ANTIMONY	63	62	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)  Fe, P, No Qual, >4x
(TOT)	IRON	1112	38	75.00-125.00	-	IRON	
SL-545-NBZ-SB-0.0-0.5MSD	PHOSPHORUS	-	56	75.00-125.00	-	PHOSPHORUS	
(TOT)							
(SL-511-NBZ-SB-0.0-0.5							
SL-511-NBZ-SB-2.5-3.5							
SL-545-NBZ-SB-0.0-0.5							
SL-845-NBZ-SB-0.0-0.5)							

Method: 6020A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-545-NBZ-SB-0.0-0.5MSD	STRONTIUM	-	196	75.00-125.00	-	STRONTIUM	J(all detects)
(TOT)							
(SL-511-NBZ-SB-0.0-0.5							
SL-511-NBZ-SB-2.5-3.5							
SL-545-NBZ-SB-0.0-0.5							
SL-845-NBZ-SB-0.0-0.5)							

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 9012B

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-545-NBZ-SB-0.0-0.5DUP (SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5)	CYANIDE	200	20.00	No Qual, OK by Difference

Method: 6010C

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-545-NBZ-SB-0.0-0.5DUP (TOT) (SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5)	MOLYBDENUM	83	20.00	No Qual, OK by Difference

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8270D SIM

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P4LELCSQ260443 (SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5)	PYRENE	115	-	79.00-112.00	-	PYRENE	J (all detects)



# Field Duplicate RPD Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 160.3M

Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
MOISTURE	7.5	5.6	29		No Qualifiers Applied

Method: 1613B

Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
1,2,3,4,6,7,8-HPCDD	17.3	13.2	27	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDF	3.75	4.26	13	50.00	
1,2,3,4,7,8,9-HPCDF	0.363	0.597	49	50.00	
1,2,3,4,7,8-HxCDD	0.441	0.589	29	50.00	
1,2,3,4,7,8-HxCDF	0.466	0.660	34	50.00	
1,2,3,6,7,8-HxCDD	1.04	1.10	6	50.00	
1,2,3,6,7,8-HxCDF	0.470	0.682	37	50.00	
1,2,3,7,8,9-HxCDD	0.790	0.926	16	50.00	
1,2,3,7,8-PCDF	0.878	1.13	25	50.00	
2,3,4,6,7,8-HxCDF	0.462	0.727	45	50.00	
2,3,4,7,8-PCDF	0.889	0.995	11	50.00	
2,3,7,8-TCDD	0.0707	0.0848	18	50.00	
2,3,7,8-TCDF	0.622	0.487	24	50.00	
OCDD	142	106	29	50.00	
OCDF	8.97	8.17	9	50.00	
1,2,3,7,8,9-HxCDF	0.206	0.466	77	50.00	
1,2,3,7,8-PCDD	0.269	0.688	88	50.00	
					J(all detects)

Method: 6010C

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-545-NBZ-SB-0.0-0.5 (TOT)	SL-845-NBZ-SB-0.0-0.5 (TOT)			
ALUMINUM	12100	11800	3	50.00	No Qualifiers Applied
ARSENIC	3.24	2.90	11	50.00	
BARIUM	71.5	77.1	8	50.00	
BERYLLIUM	0.477	0.466	2	50.00	
BORON	4.79	5.57	15	50.00	
CADMIUM	0.447	0.466	4	50.00	
CALCIUM	5070	5200	3	50.00	
CHROMIUM	16.7	17.7	6	50.00	
COBALT	4.80	4.62	4	50.00	
COPPER	4.81	4.80	0	50.00	
IRON	18500	18000	3	50.00	
LEAD	14.8	15.1	2	50.00	
LITHIUM	22.7	22.0	3	50.00	
MAGNESIUM	4240	4070	4	50.00	
MANGANESE	283	273	4	50.00	
NICKEL	10.7	10.3	4	50.00	
PHOSPHORUS	431	372	15	50.00	
POTASSIUM	3490	3070	13	50.00	
SODIUM	78.3	92.1	16	50.00	
TIN	2.85	2.85	0	50.00	
TITANIUM	1010	1010	0	50.00	
VANADIUM	31.2	29.6	5	50.00	
ZINC	57.2	63.6	11	50.00	
Zirconium	1.66	2.00	19	50.00	

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# Field Duplicate RPD Report

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

MOLYBDENUM	0.998	0.561	56	50.00	J(all detects)
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Method: 6020A

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-545-NBZ-SB-0.0-0.5 (TOT)	SL-845-NBZ-SB-0.0-0.5 (TOT)			
SELENIUM	0.203	0.189	7	50.00	No Qualifiers Applied
SILVER	0.201	0.233	15	50.00	
STRONTIUM	25.3	29.2	14	50.00	
THALLIUM	0.213	0.204	4	50.00	

Method: 7471B

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-545-NBZ-SB-0.0-0.5 (TOT)	SL-845-NBZ-SB-0.0-0.5 (TOT)			
MERCURY	0.182	0.284	44	50.00	No Qualifiers Applied

Method: 8015M

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
EFH (C15-C20)	35	33	6	50.00	No Qualifiers Applied
EFH (C21-C30)	150	200	29	50.00	
EFH (C30-C40)	370	460	22	50.00	

Method: 8270D SIM

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
BENZO(B)FLUORANTHENE	15	18 U	200	50.00	J(all detects) UJ(all non-detects)
CHRYSENE	20	6.9	97	50.00	
NAPHTHALENE	12	18 U	200	50.00	

Method: 9045M

Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
PH	6.97	7.06	1	50.00	No Qualifiers Applied



# Reporting Limit Outliers

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-508-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	0.120	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.119	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.106	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0429	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0919	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.0747	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.0630	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0602	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.126	5.51	PQL	ng/Kg	
	1,2,3,7,8-PCDD	JB	0.107	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0919	5.51	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JBQ	0.131	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.112	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.122	1.10	PQL	ng/Kg	
	OCDD	JB	0.486	11.0	PQL	ng/Kg	
	OCDF	JB	0.328	11.0	PQL	ng/Kg	
SL-508-NBZ-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.186	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.101	5.50	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0765	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0401	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.0656	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0377	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.114	5.50	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JBQ	0.0722	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0565	5.50	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JBQ	0.0629	5.50	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.107	1.10	PQL	ng/Kg	
	OCDD	JB	1.22	11.0	PQL	ng/Kg	
	OCDF	JB	0.322	11.0	PQL	ng/Kg	
SL-511-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.23	5.01	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.569	5.01	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0983	5.01	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0648	5.01	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.165	5.01	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.300	5.01	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.150	5.01	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.263	5.01	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.152	5.01	PQL	ng/Kg	
	1,2,3,7,8-PCDD	JBQ	0.0866	5.01	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JBQ	0.169	5.01	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.176	5.01	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JB	0.377	5.01	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.325	1.00	PQL	ng/Kg	
	OCDF	JBQ	0.821	10.0	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-NBZ-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.196	5.07	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.105	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HPCDF	JBQ	0.0526	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0507	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.112	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.114	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.0967	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.144	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.123	5.07	PQL	ng/Kg	
	1,2,3,7,8-PCDD	JBQ	0.157	5.07	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JB	0.203	5.07	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0897	5.07	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JBQ	0.186	5.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.147	1.01	PQL	ng/Kg	
	OCDD	JB	0.809	10.1	PQL	ng/Kg	
	OCDF	JBQ	0.217	10.1	PQL	ng/Kg	
SL-545-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.75	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.363	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.441	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.466	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	1.04	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.470	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.790	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.206	5.17	PQL	ng/Kg	
	1,2,3,7,8-PCDD	JBQ	0.269	5.17	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JB	0.878	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.462	5.17	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JB	0.889	5.17	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0707	1.03	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.622	1.03	PQL	ng/Kg	
	OCDF	JB	8.97	10.3	PQL	ng/Kg	
SL-548-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	0.137	4.97	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.109	4.97	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0269	4.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0513	4.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.103	4.97	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.0726	4.97	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.102	4.97	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0822	4.97	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.0965	4.97	PQL	ng/Kg	
	1,2,3,7,8-PCDD	JBQ	0.194	4.97	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JB	0.249	4.97	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0735	4.97	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JBQ	0.202	4.97	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.115	0.994	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.123	0.994	PQL	ng/Kg	
	OCDD	JB	0.438	9.94	PQL	ng/Kg	
	OCDF	JBQ	0.180	9.94	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-845-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.26	5.27	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.597	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.589	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.660	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	1.10	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.682	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.926	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.466	5.27	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.688	5.27	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JB	1.13	5.27	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.727	5.27	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JB	0.995	5.27	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0848	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.487	1.05	PQL	ng/Kg	
	OCDF	JB	8.17	10.5	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-NBZ-SB-0.0-0.5	BERYLLIUM	J	0.950	1.04	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.489	1.04	PQL	mg/Kg	
	MOLYBDENUM	J	0.396	2.09	PQL	mg/Kg	
	SODIUM	J	99.6	104	PQL	mg/Kg	
	TIN	J	3.49	10.4	PQL	mg/Kg	
	Zirconium	J	2.33	5.22	PQL	mg/Kg	
SL-511-NBZ-SB-2.5-3.5	CADMIUM	J	0.354	1.02	PQL	mg/Kg	J (all detects)
	MOLYBDENUM	J	0.630	2.05	PQL	mg/Kg	
	TIN	J	3.68	10.2	PQL	mg/Kg	
	Zirconium	J	1.34	5.12	PQL	mg/Kg	
SL-545-NBZ-SB-0.0-0.5	ARSENIC	J	3.24	4.24	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.477	1.06	PQL	mg/Kg	
	BORON	J	4.79	10.6	PQL	mg/Kg	
	CADMIUM	J	0.447	1.06	PQL	mg/Kg	
	MOLYBDENUM	J	0.998	2.12	PQL	mg/Kg	
	SODIUM	J	78.3	106	PQL	mg/Kg	
	TIN	J	2.85	10.6	PQL	mg/Kg	
SL-845-NBZ-SB-0.0-0.5	Zirconium	J	1.66	5.30	PQL	mg/Kg	J (all detects)
	ARSENIC	J	2.90	4.15	PQL	mg/Kg	
	BERYLLIUM	J	0.466	1.04	PQL	mg/Kg	
	BORON	J	5.57	10.4	PQL	mg/Kg	
	CADMIUM	J	0.466	1.04	PQL	mg/Kg	
	MOLYBDENUM	J	0.561	2.08	PQL	mg/Kg	
	SODIUM	J	92.1	104	PQL	mg/Kg	
	TIN	J	2.85	10.4	PQL	mg/Kg	
	Zirconium	J	2.00	5.19	PQL	mg/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-NBZ-SB-0.0-0.5	SELENIUM	J	0.402	0.418	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0824	0.209	PQL	mg/Kg	
SL-511-NBZ-SB-2.5-3.5	SELENIUM	J	0.402	0.409	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0769	0.205	PQL	mg/Kg	
SL-545-NBZ-SB-0.0-0.5	SELENIUM	J	0.203	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.201	0.212	PQL	mg/Kg	
SL-845-NBZ-SB-0.0-0.5	SELENIUM	J	0.189	0.415	PQL	mg/Kg	J (all detects)
	THALLIUM	J	0.204	0.208	PQL	mg/Kg	

**Method:** 7471B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-511-NBZ-SB-2.5-3.5	MERCURY	J	0.0140	0.0171	PQL	mg/Kg	J (all detects)

**Method:** 8015M

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-506-NBZ-SB-0.0-0.5	EFH (C21-C30)	J	4.3	5.2	PQL	mg/Kg	J (all detects)
SL-507-NBZ-SB-3.5-4.5	EFH (C21-C30)	J	3.3	5.3	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	8.3	11	PQL	mg/Kg	
	GASOLINE RANGE ORGANICS (C5-C12)	J	0.6	1.0	PQL	mg/Kg	
SL-508-NBZ-SB-0.0-0.5	EFH (C21-C30)	J	3.2	5.5	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	7.9	11	PQL	mg/Kg	
SL-508-NBZ-SB-4.0-5.0	EFH (C21-C30)	J	3.2	5.5	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	8.2	11	PQL	mg/Kg	
SL-511-NBZ-SB-2.5-3.5	EFH (C21-C30)	J	3.5	5.3	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	8.9	11	PQL	mg/Kg	
	GASOLINE RANGE ORGANICS (C5-C12)	J	0.3	1.1	PQL	mg/Kg	
SL-546-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	11	26	PQL	mg/Kg	J (all detects)
SL-547-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	10	11	PQL	mg/Kg	J (all detects)

**Method:** 8081B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-507-NBZ-SB-0.0-0.5	4,4'-DDE	J	0.63	1.8	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.43	1.8	PQL	ug/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH139

Laboratory: LL

EDD Filename: PH139

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-508-NBZ-SB-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.6	20	PQL	ug/Kg	J (all detects)
		J	1.2	1.8	PQL	ug/Kg	
SL-508-NBZ-SB-4.0-5.0	CHRYSENE	J	0.48	1.9	PQL	ug/Kg	J (all detects)
SL-511-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.71	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.70	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.7	PQL	ug/Kg	
	PYRENE	J	1.4	1.7	PQL	ug/Kg	
SL-545-NBZ-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	15	18	PQL	ug/Kg	J (all detects)
		J	12	18	PQL	ug/Kg	
SL-845-NBZ-SB-0.0-0.5	CHRYSENE	J	6.9	18	PQL	ug/Kg	J (all detects)



## **Enclosure II**

### **EPA Level IV Data Validation Reports**



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 4, 2013  
**LDC Report Date:** February 11, 2014  
**Matrix:** Soil  
**Parameters:** Semivolatiles  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH139

**Sample Identification**

SL-508-NBZ-SB-0.0-0.5  
SL-508-NBZ-SB-4.0-5.0  
SL-545-NBZ-SB-0.0-0.5  
SL-845-NBZ-SB-0.0-0.5  
SL-511-NBZ-SB-0.0-0.5  
SL-511-NBZ-SB-2.5-3.5  
SL-545-NBZ-SB-0.0-0.5MS  
SL-545-NBZ-SB-0.0-0.5MSD



## Introduction

This data review covers 8 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Semivolatiles.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. GC/MS Instrument Performance Check**

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

## **III. Initial Calibration**

Initial calibration was performed using required standard.

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

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

## **IV. Continuing Calibration**

Continuing calibration was performed at the required frequencies.

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

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

## **V. Blanks**

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method.

Samples EB1-120513, EB2-120513, and EB3-120513 (all from SDG PH140) were identified as equipment blanks. No semivolatile contaminants were found with the following exceptions:



Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB1-120513	12/5/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate	0.21 ug/L 0.50 ug/L 0.11 ug/L	SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0
EB2-120513	12/5/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate	0.20 ug/L 0.50 ug/L 0.095 ug/L	SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5
EB3-120513	12/5/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate	0.20 ug/L 0.51 ug/L 0.063 ug/L	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5

Sample FB-041613 (from SDG PH032) was identified as a field blank. No semivolatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
FB-041613	4/16/13	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate 2-Methylnaphthalene	0.11 ug/L 0.25 ug/L 0.012 ug/L	All samples in SDG PH139

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

## 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 not within QC limits. Since the samples were diluted out, no data were qualified.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
344LELCS	Pyrene	115 (79-112)	All samples in SDG PH139	J (all detects)	P



## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

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

## XI. Target Compound Identifications

All target compound identifications were within validation criteria.

## XII. Compound Quantitation

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 PH139	All compounds reported below the RL.	J (all detects)	A

## XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

## XIV. System Performance

The system performance was acceptable.

## XV. Overall Assessment of Data

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

## XVI. Field Duplicates

Samples SL-545-NBZ-SB-0.0-0.5 and SL-845-NBZ-SB-0.0-0.5 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
Benzo(b)fluoranthene	15	18U	200 (≤50)	J (all detects) UJ (all non-detects)	A



Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
Chrysene	20	6.9	97 (≤50)	J (all detects)	A
Naphthalene	12	18U	200 (≤50)	J (all detects) UJ (all non-detects)	A



**Santa Susana Field Laboratory**  
**Semivolatiles - Data Qualification Summary - SDG PH139**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH139	SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5	Pyrene	J (all detects)	P	Laboratory control samples (%R)(L)
PH139	SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)
PH139	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5	Benzo(b)fluoranthene  Naphthalene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)
PH139	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5	Chrysene	J (all detects)	A	Field duplicates (RPD) (FD)

**Santa Susana Field Laboratory**  
**Semivolatiles - Laboratory Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Semivolatiles - Field Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG



**METHOD:** GC/MS Polynuclear Aromatic Hydrocarbons (EPA SW 846 Method 8270C-SIM) <sup>D</sup>  
SVOCs

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: 12/4/13
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	RSD ≤ 30%
IV.	Continuing calibration/ICV	A	1W1CW ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LC
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	FD = 3 + 4
XVII.	Field blanks	SW	EB1 = EB1-120513 EB2 = EB2-120513 EB3 = EB3-120513 All EBs from SDG# PH140 PB = PB-041613 (SDG# PH032)

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-508-NBZ-SB-0.0-0.5	11	21	31	08LKL E344
2	SL-508-NBZ-SB-4.0-5.0	12	22	32	
3	SL-545-NBZ-SB-0.0-0.5	13	23	33	
4	SL-845-NBZ-SB-0.0-0.5	14	24	34	
5	SL-511-NBZ-SB-0.0-0.5	15	25	35	
6	SL-511-NBZ-SB-2.5-3.5	16	26	36	
7	SL-545-NBZ-SB-0.0-0.5MS	17	27	37	
8	SL-545-NBZ-SB-0.0-0.5MSD	18	28	38	
9		19	29	39	
10		20	30	40	



## Method: Semivolatiles (EPA SW 846 Method 8270D)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 12 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq 30\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 25\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



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



# VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS SVOA

A. Phenol	T. 4-Chloroaniline	MM. 4-Chlorophenyl-phenyl ether	FFF. Di-n-octylphthalate	YYY. 2,3,5-Trimethylnaphthalene
B. Bis (2-chloroethyl) ether	U. Hexachlorobutadiene	NN. Fluorene	GGG. Benzo(b)fluoranthene	ZZZ. Perylene
C. 2-Chlorophenol	V. 4-Chloro-3-methylphenol	OO. 4-Nitroaniline	HHH. Benzo(k)fluoranthene	AAAA. Dibenzothiophene
D. 1,3-Dichlorobenzene	W. 2-Methylnaphthalene	PP. 4,6-Dinitro-2-methylphenol	III. Benzo(a)pyrene	BBBB. Benzo(a)fluoranthene
E. 1,4-Dichlorobenzene	X. Hexachlorocyclopentadiene	QQ. N-Nitrosodiphenylamine	JJJ. Indeno(1,2,3-cd)pyrene	CCCC. Benzo(b)fluorene
F. 1,2-Dichlorobenzene	Y. 2,4,6-Trichlorophenol	RR. 4-Bromophenyl-phenylether	KKK. Dibenzo(a,h)anthracene	DDDD. cis/trans-Decalin
G. 2-Methylphenol	Z. 2,4,5-Trichlorophenol	SS. Hexachlorobenzene	LLL. Benzo(g,h,i)perylene	EEEE. Biphenyl
H. 2,2'-Oxybis(1-chloropropane)	AA. 2-Chloronaphthalene	TT. Pentachlorophenol	MMM. Bis(2-Chloroisopropyl)ether	FFFF. Retene
I. 4-Methylphenol	BB. 2-Nitroaniline	UU. Phenanthrene	NNN. Aniline	GGGG. C30-Hopane
J. N-Nitroso-di-n-propylamine	CC. Dimethylphthalate	VV. Anthracene	OOO. N-Nitrosodimethylamine	HHHH. 1-Methylphenanthrene
K. Hexachloroethane	DD. Acenaphthylene	WW. Carbazole	PPP. Benzoic Acid	IIII. 1,4-Dioxane
L. Nitrobenzene	EE. 2,6-Dinitrotoluene	XX. Di-n-butylphthalate	QQQ. Benzyl alcohol	JJJJ. Acetophenone
M. Isophorone	FF. 3-Nitroaniline	YY. Fluoranthene	RRR. Pyridine	KKKK. Atrazine
N. 2-Nitrophenol	GG. Acenaphthene	ZZ. Pyrene	SSS. Benzidine	LLLL. Benzaldehyde
O. 2,4-Dimethylphenol	HH. 2,4-Dinitrophenol	AAA. Butylbenzylphthalate	TTT. 1-Methylnaphthalene	MMMM. Caprolactam
P. Bis(2-chloroethoxy)methane	II. 4-Nitrophenol	BBB. 3,3'-Dichlorobenzidine	UUU. Benzo(b)thiophene	NNNN.
Q. 2,4-Dichlorophenol	JJ. Dibenzofuran	CCC. Benzo(a)anthracene	VVV. Benzonaphthothiophene	OOOO.
R. 1,2,4-Trichlorobenzene	KK. 2,4-Dinitrotoluene	DDD. Chrysene	WWW. Benzo(e)pyrene	PPPP.
S. Naphthalene	LL. Diethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	XXX. 2,6-Dimethylnaphthalene	QQQQ.



LDC #: 31224B26

## VALIDATION FINDINGS WORKSHEET

## Field Blanks

Page: 1 of 2Reviewer: DR2nd Reviewer: SM

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

☒ N N/A Were field blanks identified in this SDG?☒ N N/A Were target compounds detected in the field blanks?Blank units: ug/L Associated sample units: ug/kgSampling date: 4/16/13Field blank type: (circle one) Field Blank Rinsate / Other: Associated Samples: A(1)Lab: F

FB = FB - 041613 (SDG # PH032)

Compound	Blank ID		Sample Identification						
	FB	5X/10X	+						
XX	0.11	1.1							
EEE	0.25	10.25	7.6/200						
W	0.012	0.06							

Blank units: ug/L Associated sample units: ug/kgSampling date: 12/5/13Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 1-2 (ND + 75X)

EB1 = EB1-120513 (SDG # PH140)

Lab: F

Compound	Blank ID		Sample Identification						
	EB1	10X							
XX	0.21	2.1							
LL	0.50	5.0							
EEE	0.11	1.1							

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

Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".



LDC #: 31224826

## VALIDATION FINDINGS WORKSHEET

Page: 2 of 2Field BlanksReviewer: BK2nd Reviewer: Sm

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Y N N/A Were field blanks identified in this SDG?Y N N/A Were target compounds detected in the field blanks?Blank units: ug/L Associated sample units: ug/LSampling date: 12/5/13Field blank type: (circle one) Field Blank / Rinsate / Other EB Associated Samples: 5-6 <sup>ND</sup> (ND) 32EB2 = EB2-120513 (SDG # PH140)Code: F

Compound	Blank ID		Sample Identification							
	<u>EB2</u>	<u>10X</u>								
<u>XX</u>	<u>0.20</u>	<u>2.0</u>								
<u>LL</u>	<u>0.50</u>	<u>5.0</u>								
<u>EEE</u>	<u>0.095</u>	<u>0.95</u>								

Blank units: ug/L Associated sample units: ug/LSampling date: 12/5/13Field blank type: (circle one) Field Blank / Rinsate / Other EB Associated Samples: 3-4 (ND)EB3 = EB3-120513 (SDG # PH140)Code: F

Compound	Blank ID		Sample Identification							
	<u>EB3</u>	<u>10X</u>								
<u>XX</u>	<u>0.20</u>	<u>2.0</u>								
<u>LL</u>	<u>0.51</u>	<u>5.1</u>								
<u>EEE</u>	<u>0.063</u>	<u>0.63</u>								

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

Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".



**METHOD:** GC/MS BNA (EPA SW 846 Method 8270D)

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

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Was a MS/MSD analyzed every 20 samples of each matrix?

Y ☒ N ☐ N/A ☐ Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

[illegible]







VALIDATION FINDINGS WORKSHEET  
Field Duplicates

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A  
Y N N/A

Were field duplicate pairs identified in this SDG?

Were target compounds identified in the field duplicate pairs?

Code: FD

Compound	Concentration ( <u>ug/kg</u> )		RPD	Qualification
	3	4		
GGG	15	18u	200	JLUJA
PDD	20	6.9	97	Jdet/A
S	12	18u	200	JLUJA

Compound	Concentration ( )		RPD	Qualification

Compound	Concentration ( )		RPD	Qualification

Compound	Concentration ( )		RPD	Qualification



LDC #: 31224B2b

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 1  
Reviewer BR  
2<sup>nd</sup> Reviewer Sm

METHOD: GC/MS SVOA (EPA SW 846 Method 8270DSIM)

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

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 $A_x$  = Area of Compound $C_x$  = Concentration of compound, $S$  = Standard deviation of the RRFs, $A_{is}$  = Area of associated internal standard $C_{is}$  = Concentration of internal standard $X$  = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (1 std)	Recalculated RRF (1 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	HP10976	12/3/2013	N-Nitrosodimethylamine (IS1)	1.188	1.188	1.169	1.169	3	3
			Naphthalene (IS2)	1.027	1.027	1.024	1.025	2	2
			Fluorene (IS3)	1.265	1.265	1.259	1.258	2	2
			Anthracene (IS4)	1.080	1.080	1.080	1.080	4	4
			Chrysene (IS5)	1.113	1.113	1.100	1.100	1	1
			Benzo(a)pyrene (IS6)	1.129	1.129	1.106	1.106	3	3

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.



# **VALIDATION FINDINGS WORKSHEET** **Continuing Calibration Results Verification**

METHOD: GC/MS SVOA (EPA SW 846 Method 8270DSIM)

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:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound

Cx = Concentration of compound

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial RRF)	Reported (CC RRF)	Recalculated (CC RRF)	Reported %D	Recalculated %D
1	IL0671	12/24/13	N-Nitrosodimethylamine (IS1)	1.169	1.209	1.209	3	3
			Naphthalene (IS2)	1.024	1.031	1.031	1	1
			Fluorene (IS3)	1.259	1.257	1.257	0	0
			Anthracene (IS4)	1.080	1.067	1.067	1	1
			Chrysene (IS5)	1.100	1.187	1.187	8	8
			Benzo(a)pyrene (IS6)	1.106	1.182	1.182	7	7

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



# Surrogate Results Verification

Reviewer: BR  
2nd reviewer: SM

**METHOD:** GC/MS Semivolatiles (EPA SW 846 Method 8270D)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery:  $SF/SS \times 100$

Where: SF = Surrogate Found  
SS = Surrogate Spiked

Sample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	Fluoranthene-d10 1.00	0.865	87	87	0
2-Fluorobiphenyl	Benzo(a)pyrene-d12	0.874	87	87	0
Terphenyl-d14	1-methylnaphthalene-d10	1.053	105	105	0
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					



# VALIDATION FINDINGS WORKSHEET Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

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:

$$\% \text{ Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where: SSC = Spiked sample concentration  
SA = Spike added

SC = Sample concentration

$$\text{RPD} = | \text{MSC} - \text{MSD} | * 2 / (\text{MSC} + \text{MSDC})$$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 7/8

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
						Percent Recovery		Percent Recovery		RPD	
	MS	MSD		MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.33	33.33	0	29.86	30.9	90	90	93	93	3	3.4
Pentachlorophenol											
Pyrene	33.33	33.33	0	35.35	39.41	106	106	118	118	11	11

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.



Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: BR2nd Reviewer: 82**METHOD:** GC/MS BNA (EPA SW 846 Method 8270D)

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

% Recovery =  $100 * (SC/SA)$ 

Where: SSC = Spike concentration  
SA = Spike added

RPD =  $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$ 

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 344LELCS

Compound	Spike Added ( <u>ug/kg</u> )		Spike Concentration ( <u>ug/kg</u> )		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	—	32.97	—	99	99	—	—	—	—
Pentachlorophenol										
Pyrene	33.33	—	38.34	—	115	115	—	—	—	—

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.



**METHOD:** GC/MS BNA (EPA SW 846 Method 8270D)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(V_i)(DF)(2.0)}{(A_s)(RRF)(V_o)(V_i)(\%S)}$$

Example:

Sample I.D. 2, DD:

$PPD = \frac{0.48}{\frac{0.5}{m} \frac{1}{s_y}} \mu_y$

$$\text{Conc.} = \frac{(3781) \times 1 \times 1000}{(265805 \times 1.100 \times 30 \times 0.90)}$$

$$= 0.478946586 \frac{\text{kg}}{\text{kg}}$$

- |          |   |  |
|----------|---|--|
| $A_x$    | = | 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                                   |

[illegible]



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 4, 2013  
**LDC Report Date:** February 11, 2014  
**Matrix:** Soil  
**Parameters:** Chlorinated Pesticides  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH139

**Sample Identification**

SL-506-NBZ-SB-0.0-0.5  
SL-507-NBZ-SB-0.0-0.5  
SL-507-NBZ-SB-3.5-4.5  
SL-508-NBZ-SB-0.0-0.5  
SL-508-NBZ-SB-4.0-5.0



## Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081B for Chlorinated Pesticides.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## I. Technical Holding Times

All technical holding time requirements were met.

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

## II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

## III. Initial Calibration

Initial calibration of single compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

## IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/16/13	CCV-MIXA3WK	RTX-CLP	4,4'-DDE 4,4'-DDD Endosulfan II	23 25 33	PBLK20344	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0%.

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.



Sample EB1-120513 (from SDG PH140) was identified as an equipment blank. No chlorinated pesticide contaminants were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No chlorinated pesticide contaminants were found.

#### **VI. Surrogate Spikes**

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

#### **VII. Matrix Spike/Matrix Spike Duplicates**

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

#### **VIII. Laboratory Control Samples (LCS)**

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

#### **IX. Regional Quality Assurance and Quality Control**

Not applicable.

#### **X. Florisil Cartridge Check**

Florisil cleanup was not required and therefore not performed in this SDG.

#### **XI. GPC Calibration**

GPC cleanup was not required and therefore not performed in this SDG.

#### **XII. Target Compound Identification**

All target compound identifications were within validation criteria.

#### **XIII. Compound Quantitation**

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 PH139	All compounds reported below the RL.	J (all detects)	A



#### **XIV. Overall Assessment of Data**

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

#### **XV. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Data Qualification Summary - SDG PH139**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH139	SL-506-NBZ-SB-0.0-0.5 SL-507-NBZ-SB-0.0-0.5 SL-507-NBZ-SB-3.5-4.5 SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG



LDC #: 31224B3a **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH139

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 2/7/14

Page: 1 of 1

Reviewer: BZ

2nd Reviewer: SA

**METHOD:** GC Chlorinated Pesticides (EPA SW846 Method 8081A)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/4/13
II.	GC/ECD Instrument Performance Check	A	
III.	Initial calibration	A	RCD ≤ 20%
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client spec.
VIII.	Laboratory control samples	A	LES
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	A	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	SDG#
XVI.	Field blanks	ND	EB1 = EB1-120513 (PA140) FB = FB-0413 (PA032)

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: 501

1	SL-506-NBZ-SB-0.0-0.5	11	21	31	PBLK20344
2	SL-507-NBZ-SB-0.0-0.5	12	22	32	
3	SL-507-NBZ-SB-3.5-4.5	13	23	33	
4	SL-508-NBZ-SB-0.0-0.5	14	24	34	
5	SL-508-NBZ-SB-4.0-5.0	15	25	35	
6		16	26	36	
7		17	27	37	
8		18	28	38	
9		19	29	39	
10		20	30	40	

Notes:



**Method:** Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/ECD Instrument performance check</b>				
Was the instrument performance found to be acceptable?	/			
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) $\leq 20\%$ ?	/			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		/		
Did the initial calibration meet the curve fit acceptance criteria?			/	
Were the RT windows properly established?	/			
Were the required standard concentrations analyzed in the initial calibration?	/			
<b>IV. Continuing calibration</b>				
What type of continuing calibration calculation was performed? <u>X</u> %D or %R	/			
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	/			
Were endrin and 4,4'-DDT breakdowns $\leq 15\%$ for individual breakdown in the Evaluation mix standards?	/			
Was a continuing calibration analyzed daily?	/			
Were all percent differences (%D) $\leq 20\%$ or percent recoveries 80-120%?	/	/		
Were all the retention times within the acceptance windows?	/			
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/			
Were extract cleanup blanks analyzed with every batch requiring clean-up?			/	
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	/			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			/	



Validation Area	Yes	No	NA	Findings/Comments
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			/	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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?			/	
<b>VIII. Laboratory control samples</b>				
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?	/			
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>X. Target compound identification</b>				
Were the retention times of reported detects within the RT windows?	/			
<b>XI. Compound quantitation/CRQLs</b>				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	/			
<b>XII. System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target compounds were detected in the field blanks.		/		



## VALIDATION FINDINGS WORKSHEET

**METHOD:** Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



LDC #: 31224B3a

## VALIDATION FINDINGS WORKSHEET

### Continuing Calibration

Page: 1 of 1  
Reviewer: BR  
2nd Reviewer: SA

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

Y	N	N/A	Were Evaluation mix standards run before initial calibration and before samples?
Y	N	N/A	Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard ( $\leq 15.0\%$ for individual breakdowns)?

✓	N	N/A	Was at least one standard run daily to verify the working curve?
Y	N	N/A	Did the continuing calibration standards meet the percent difference (%D) / relative percent difference (RPD) criteria of <20.0%?

**Level IV/D Only**

Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

[illegible]

A. alpha-BHC  
B. beta-BHC  
C. delta-BHC  
D. gamma-BHC

E. Heptachlor  
F. Aldrin  
G. Heptachlor epoxide  
H. Endosulfan I

I. Dieldrin  
J. 4,4'-DDE  
K. Endrin  
L. Endosulfan II

M. 4,4'-DDD  
N. Endosulfan sulfate  
O. 4,4'-DDT  
P. Methoxychlor

Q. Endrin ketone  
R. Endrin aldehyde  
S. alpha-Chlordane  
T. gamma-Chlordane

U. Toxaphene  
V. Aroclor-1016  
W. Aroclor-1221  
X. Aroclor-1232

Y. Aroclor-1242  
Z. Aroclor-1248  
AA. Aroclor-1254  
BB. Aroclor-1260

CC. DB 608  
DD. DB 1701  
EE. Hexachlobenzene  
FF.

GG. \_\_\_\_\_  
HH. \_\_\_\_\_  
II. \_\_\_\_\_  
JJ. \_\_\_\_\_



LDC#: 31224B3a

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

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

METHOD: GC Pesticides (EPA SW 846 Method 8081B)

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

$$\%RSD = 100 * (S/X)$$

Where

 $A_x$  = 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	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/11/2013	Endosulfan I (RTX-CLP)	577000	576598	588000	588200	5	5
	H9191A		Methoxychlor (RTX-CLP)	243000	242738	243000	243400	2	2
			Endosulfan I (RTX-CLPII)	77300	77278	79100	79080	3	3
			Methoxychlor (RTX-CLPII)	46400	46400	47000	47000	1	1.5

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



LDC#: 31224B3a

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

Page: 1 of 1

Reviewer: BR

2nd Reviewer: *sm*

METHOD: GC Pesticides (EPA SW 846 Method 8081B)

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:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound,

Cx = Concentration of compound,

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound	Average CF/ Conc	Reported Conc/CF (CC)	Recalculated Conc/CF (CC)	Reported % D	Recalculated %D
1	MIXA3WK	12/16/2013	Endosulfan I (RTX-CLP)	10.00	11.20	11.20	12	12
		9:10	Methoxychlor (RTX-CLP)	100.0	107.77	107.77	8	8
			Endosulfan I (RTX-CLPII)	10.00	10.90	10.90	9	9
			Methoxychlor (RTX-CLPII)	100.0	97.59	100.84	1	1
2	MIXA3WL	12/16/2013	Endosulfan I (RTX-CLP)	10.00	9.84	9.84	2	2
		15:16	Methoxychlor (RTX-CLP)	100.00	103.79	103.79	4	4
			Endosulfan I (RTX-CLPII)	10.00	9.38	9.38	6	6
			Methoxychlor (RTX-CLPII)	100.00	98.06	98.06	2	2

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



# VALIDATION FINDINGS WORKSHEET Surrogate Results Verification

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene	STX-CLP	10.1	9.724	97	97	0
Decachlorobiphenyl	STX-CLPIS	10.2	11.123	110	109.4	0.5
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes:



LDC #: 3122483a

# **VALIDATION FINDINGS WORKSHEET** **Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification**

Page: 1 of 1  
 Reviewer: BR  
 2nd Reviewer: PH

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

% Recovery =  $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration  
 SA = Spike added

SC = Concentration

RPD =  $|LCS - LCSD| * 2 / (LCS + LCSD)$

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS20344

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
	LCS	LCSD	LCS	LCSD						
gamma-BHC	3.99 <sup>2</sup>	—	3.99	—	117	117	—	—	—	—
4,4'-DDT	7.15	—	8.45	—	118	118	—	—	—	—
Aroclor 1260										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 31224B3A**VALIDATION FINDINGS WORKSHEET**  
**Sample Calculation Verification**Page: 1 of 1Reviewer: BR2nd reviewer: YM**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)☒ N N/A  
☒ N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

RTX-CLP II 0.43  $\mu$ g  
kgSample I.D. 2 4,4-DDT

$$\text{Conc.} = \frac{\$ (103193) (10)}{(8.34e^4) (30.3) (0.955)}$$
$$= 0.427600483 \mu\text{g/kg}$$

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

Note: \_\_\_\_\_



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 4, 2013  
**LDC Report Date:** February 10, 2014  
**Matrix:** Soil  
**Parameters:** Polychlorinated Biphenyls  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH139

**Sample Identification**

SL-508-NBZ-SB-0.0-0.5  
SL-508-NBZ-SB-4.0-5.0  
SL-545-NBZ-SB-0.0-0.5  
SL-845-NBZ-SB-0.0-0.5  
SL-548-NBZ-SB-0.0-0.5  
SL-545-NBZ-SB-0.0-0.5MS  
SL-545-NBZ-SB-0.0-0.5MSD



## Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082A for Polychlorinated Biphenyls.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. GC/ECD Instrument Performance Check**

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

## **III. Initial Calibration**

Initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

## **IV. Continuing Calibration**

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

## **V. Blanks**

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Samples EB1-120513 and EB3-120513 (both from SDG PH140) were identified as equipment blanks. No polychlorinated biphenyl contaminants were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No polychlorinated biphenyl contaminants were found.

## **VI. Surrogate Spikes**

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



**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Data Qualification Summary - SDG PH139**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH139	SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-548-NBZ-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG



LDC #: 31224B3b **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH139

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 12/7/14

Page: 1 of 1

Reviewer: BR

2nd Reviewer: SM

**METHOD:** GC Polychlorinated Biphenyls (EPA SW 846 Method 8082A)

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: 12/4/13
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	RSD ≤ 20%
IV.	Continuing calibration/ICV	A	1CV/1CV ≤ 20%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	A	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	ND	FD = 3 + 4
XVI.	Field blanks	ND	EB1 = EB1-120513 7 SDG # PH139 EB2 = EB3-120513 5 FB = FB-041613 SDG # PH 032

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: 501

1	SL-508-NBZ-SB-0.0-0.5	11	21	31	PBLK07344
2	SL-508-NBZ-SB-4.0-5.0	12	22	32	
3	SL-545-NBZ-SB-0.0-0.5	13	23	33	
4	SL-845-NBZ-SB-0.0-0.5	14	24	34	
5	SL-548-NBZ-SB-0.0-0.5	15	25	35	
6	SL-545-NBZ-SB-0.0-0.5MS	16	26	36	
7	SL-545-NBZ-SB-0.0-0.5MSD	17	27	37	
8		18	28	38	
9		19	29	39	
10		20	30	40	

Notes:



**Method:** Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. GC/ECD instrument performance check</b>				
Was the instrument performance found to be acceptable?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>See</u>
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) $\leq 20\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the required standard concentrations analyzed in the initial calibration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
What type of continuing calibration calculation was performed? <u>X</u> %D or %R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were endrin and 4,4'-DDT breakdowns $\leq 15\%$ for individual breakdown in the Evaluation mix standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 20\%$ or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were extract cleanup blanks analyzed with every batch requiring clean-up?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



Validation Area	Yes	No	NA	Findings/Comments
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input checked="" type="checkbox"/>			
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>			
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>			
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>			
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		<input checked="" type="checkbox"/>		
Were the performance evaluation (PE) samples within the acceptance limits?			<input checked="" type="checkbox"/>	
<b>X. Target compound identification</b>				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>			
<b>XI. Compound quantitation/CRQLs</b>				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	<input checked="" type="checkbox"/>			
<b>XII. System performance</b>				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.	<input checked="" type="checkbox"/>			
Target compounds were detected in the field duplicates.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>			
Target compounds were detected in the field blanks.		<input checked="" type="checkbox"/>		



## VALIDATION FINDINGS WORKSHEET

**METHOD:** Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



LDC#: 31224B3b

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 1Reviewer: BR2nd Reviewer: Sm

METHOD: GC PCBs (EPA SW 846 Method 8082A)

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

$$CF = A/C$$

average CF = sum of the CF/number of standards

$$\%RSD = 100 * (S/X)$$

Where:

A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF ( 500 std)	Recalculated CF ( 500 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL 17342A	12/6/2013	PCB1260-1 (ZB-MultiR1)	46341	46341	47185	47185	2	2
			PCB1260-1 (ZB-MultiR2I)	2749	2749	2973	2973	11	11

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#: 31224B3b

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

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

METHOD: GC PCBs (EPA SW 846 Method 8082)

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	Conc	Reported Conc (CCV)	Recalculated Conc (CCV)	Reported % D	Recalculated %D
1	AR163GP	12/11/2013	PCB1260 (ZB-MultiR1)	200	176.18	176.18	12	12
			PCB1260 (ZB-MultiR2)	200	222.66	222.66	11	11

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



LDC #: 31224021

# **VALIDATION FINDINGS WORKSHEET** **Surrogate Results Verification**

Page: 1 of 1  
 Reviewer: BR  
 2nd reviewer: Sm

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery:  $SF/SS \times 100$ 

Where: SF = Surrogate Found  
 SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene	<u>23multire</u>	<u>10.1</u>	<u>10.595152</u>	<u>105</u>	<u>105</u>	<u>0</u>
Decachlorobiphenyl	<u>1</u>	<u>10.2</u>	<u>10.384684</u>	<u>102</u>	<u>102</u>	<u>0</u>
Decachlorobiphenyl						

Sample ID: \_\_\_\_\_

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: \_\_\_\_\_

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: \_\_\_\_\_

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes: \_\_\_\_\_



LDC #: 31224836

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

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

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery =  $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration  
 SA = Spike added

SC = Concentration

RPD =  $|MS - MSD| * 2 / (MS + MSD)$

MS = Matrix spike percent recovery

MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 6/7

Compound	Spike Added <i>(ug/kg)</i>		Sample Concentration <i>(ug/kg)</i>	Spiked Sample Concentration <i>(ug/kg)</i>		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
			-								
gamma-BHC											
4,4'-DDT											
Aroclor 1260	167	167	0	154.39	146.48	92	92	88	88	5	5.3

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



LDC #: 31224936

# **VALIDATION FINDINGS WORKSHEET** **Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification**

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

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

% Recovery =  $100 * (SSC - SC) / SA$

Where: SSC = Spiked sample concentration  
 SA = Spike added

SC = Concentration

RPD =  $|LCS - LCSD| * 2 / (LCS + LCSD)$

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS07344

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
	<div> <div>114</div> <div>114</div> </div>		<div> <div>114</div> <div>114</div> </div>		Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma-BHC	LCS	LCSD	LCS	LCSD						
4,4'-DDT										
Aroclor 1260	167	—	189.93	—	114	114	—	—	—	—

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

<del>Y</del>	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

ZB Multi RZ

$$\text{Arrears } 1260-1 = \frac{(1714933.5)(10)}{(2973)(30)}$$

$$= 192.2786747$$

$$1260 - 2 = 185.395477$$

$$1260 - 3 = 192.670334$$

$$1260 - 4 = 186.70854$$

$$1260 - 5 = 195.407775$$

$$1260 - \frac{1}{6} = 187.108605$$

$$= 189.9282343 \text{ mg}$$

**Example:**

BB = 190 ug  
Tg

Sample I.D. Al Nb

LCS 07344

Conc. = 189.9282343

$$= 19.0 \text{ mg/kg}$$

[illegible]

Note: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 4, 2013  
**LDC Report Date:** February 10, 2014  
**Matrix:** Soil  
**Parameters:** Metals  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories

**Sample Delivery Group (SDG):** PH139

**Sample Identification**

SL-545-NBZ-SB-0.0-0.5  
SL-845-NBZ-SB-0.0-0.5  
SL-511-NBZ-SB-0.0-0.5  
SL-511-NBZ-SB-2.5-3.5  
SL-545-NBZ-SB-0.0-0.5MS  
SL-545-NBZ-SB-0.0-0.5MSD  
SL-545-NBZ-SB-0.0-0.5DUP



## Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010C, 6020A and 7471B for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Molybdenum, Manganese, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## I. Technical Holding Times

All technical holding time requirements were met.

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

## II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

## III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

## IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Calcium Magnesium Tin Zinc	4.84 mg/Kg 2.30 mg/Kg 1.63 mg/Kg 0.233 mg/Kg	All samples in SDG PH139
ICB/CCB	Molybdenum Titanium Thallium	2.9 ug/L 2.5 ug/L 0.21 ug/L	All samples in SDG PH139
ICB/CCB	Magnesium	38.0 ug/L	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:



Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-545-NBZ-SB-0.0-0.5	Molybdenum Tin	0.998 mg/Kg 2.85 mg/Kg	0.998U mg/Kg 2.85U mg/Kg
SL-845-NBZ-SB-0.0-0.5	Molybdenum Tin Thallium	0.561 mg/Kg 2.85 mg/Kg 0.204 mg/Kg	0.561U mg/Kg 2.85U mg/Kg 0.204U mg/Kg
SL-511-NBZ-SB-0.0-0.5	Molybdenum Tin	0.396 mg/Kg 3.49 mg/Kg	0.396U mg/Kg 3.49U mg/Kg
SL-511-NBZ-SB-2.5-3.5	Molybdenum Tin	0.630 mg/Kg 3.68 mg/Kg	0.630U mg/Kg 3.68U mg/Kg

Samples EB2-120513 and EB3-120513 (both from SDG PH140) were identified as equipment blanks. No metal contaminants were found with the following exceptions:

Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB2-120513	12/5/13	Zinc	0.0048 mg/L	SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5
EB3-120513	12/5/13	Zinc	0.0062 mg/L	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5

Sample FB-041613 (from SDG PH032) was identified as a field blank. No metal contaminants were found with the following exceptions:

Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
FB-041613	4/16/13	Molybdenum Tin	0.0132 mg/L 0.0029 mg/L	All samples in SDG PH139

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

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-545-NBZ-SB-0.0-0.5	Molybdenum	0.998 mg/Kg	0.998U mg/Kg
SL-845-NBZ-SB-0.0-0.5	Molybdenum	0.561 mg/Kg	0.561U mg/Kg



Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-511-NBZ-SB-0.0-0.5	Molybdenum	0.396 mg/Kg	0.396U mg/Kg
SL-511-NBZ-SB-2.5-3.5	Molybdenum	0.630 mg/Kg	0.630U mg/Kg

## V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

## VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-545-NBZ-SB-0.0-0.5MS/MSD (All samples in SDG PH139)	Antimony	63 (75-125)	62 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-545-NBZ-SB-0.0-0.5MS/MSD (All samples in SDG PH139)	Strontium	-	196 (75-125)	-	J (all detects)	A

## VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## IX. Internal Standards

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

## X. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.



## XI. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG PH139	All analytes reported below the RL and above the MDL.	J (all detects)	A

## XII. Overall Assessment of Data

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

## XIII. Field Duplicates

Samples SL-545-NBZ-SB-0.0-0.5 and SL-845-NBZ-SB-0.0-0.5 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
Aluminum	12100	11800	3 (≤50)	-	-
Arsenic	3.24	2.90	11 (≤50)	-	-
Barium	71.5	77.1	8 (≤50)	-	-
Beryllium	0.477	0.466	2 (≤50)	-	-
Boron	4.79	5.57	15 (≤50)	-	-
Cadmium	0.447	0.466	4 (≤50)	-	-
Calcium	5070	5200	3 (≤50)	-	-
Chromium	16.7	17.7	6 (≤50)	-	-
Cobalt	4.80	4.62	4 (≤50)	-	-
Copper	4.81	4.80	0 (≤50)	-	-
Iron	18500	18000	3 (≤50)	-	-



Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
Lead	14.8	15.1	2 (≤50)	-	-
Lithium	22.7	22.0	3 (≤50)	-	-
Magnesium	4240	4070	4 (≤50)	-	-
Manganese	283	273	4 (≤50)	-	-
Mercury	0.182	0.284	44 (≤50)	-	-
Molybdenum	0.998	0.561	56 (≤50)	J (all detects)	A
Nickel	10.7	10.3	4 (≤50)	-	-
Phosphorus	431	372	15 (≤50)	-	-
Potassium	3490	3070	13 (≤50)	-	-
Selenium	0.203	0.189	7 (≤50)	-	-
Silver	0.201	0.233	15 (≤50)	-	-
Sodium	78.3	92.1	16 (≤50)	-	-
Strontium	25.3	29.2	14 (≤50)	-	-
Thallium	0.213	0.204	4 (≤50)	-	-
Tin	2.85	2.85	0 (≤50)	-	-
Titanium	1010	1010	0 (≤50)	-	-
Vanadium	31.2	29.6	5 (≤50)	-	-
Zinc	57.2	63.6	11 (≤50)	-	-
Zirconium	1.66	2.00	19 (≤50)	-	-



**Santa Susana Field Laboratory**  
**Metals - Data Qualification Summary - SDG PH139**

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
PH139	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH139	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5	Strontium	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH139	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
PH139	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5	Molybdenum	J (all detects)	A	Field duplicates (RPD) (FD)

**Santa Susana Field Laboratory**  
**Metals - Laboratory Blank Data Qualification Summary - SDG PH139**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH139	SL-545-NBZ-SB-0.0-0.5	Molybdenum Tin	0.998U mg/Kg 2.85U mg/Kg	A	B
PH139	SL-845-NBZ-SB-0.0-0.5	Molybdenum Tin Thallium	0.561U mg/Kg 2.85U mg/Kg 0.204U mg/Kg	A	B
PH139	SL-511-NBZ-SB-0.0-0.5	Molybdenum Tin	0.396U mg/Kg 3.49U mg/Kg	A	B
PH139	SL-511-NBZ-SB-2.5-3.5	Molybdenum Tin	0.630U mg/Kg 3.68U mg/Kg	A	B

**Santa Susana Field Laboratory**  
**Metals - Field Blank Data Qualification Summary - SDG PH139**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH139	SL-545-NBZ-SB-0.0-0.5	Molybdenum	0.998U mg/Kg	A	F
PH139	SL-845-NBZ-SB-0.0-0.5	Molybdenum	0.561U mg/Kg	A	F



SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH139	SL-511-NBZ-SB-0.0-0.5	Molybdenum	0.396U mg/Kg	A	F
PH139	SL-511-NBZ-SB-2.5-3.5	Molybdenum	0.630U mg/Kg	A	F



LDC #: 31224B4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH139

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 2/5/19

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

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	A	Sampling dates: 12/4/13
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	A	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	A	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	ICP Serial Dilution	A	
XI.	Sample Result Verification	A	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	SW	(1,2)
XIV.	Field Blanks	SW	FB=FB-04/6/13 EB=EB2-120513 (PH032)

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

= EB3-120513  
(PH140)

Validated Samples:

soil

1	SL-545-NBZ-SB-0.0-0.5	11		21		31	
2	SL-845-NBZ-SB-0.0-0.5	12		22		32	
3	SL-511-NBZ-SB-0.0-0.5	13		23		33	
4	SL-511-NBZ-SB-2.5-3.5	14		24		34	
5	SL-545-NBZ-SB-0.0-0.5MS	15		25		35	
6	SL-545-NBZ-SB-0.0-0.5MSD	16		26		36	
7	SL-545-NBZ-SB-0.0-0.5DUP	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_



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

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. ICP/MS Tune</b>				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	/			
Were %RSD of isotopes in the tuning solution $\leq 5\%$ ?	/			
<b>III. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	/			
Were the proper number of standards used?	/			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	/			
Were all initial calibration correlation coefficients $\geq 0.995$ ?	/			
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	/			
<b>V. ICP Interference Check Sample</b>				
Were ICP interference check samples performed daily?	/			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	/			
<b>VI. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		/		
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\pm 2 \times \text{RL}$ ( $\pm 2 \times \text{RL}$ for soil) was used for samples that were $\leq 5 \times \text{RL}$ , including when only one of the duplicate sample values were $\leq 5 \times \text{RL}$ .	/			
<b>VII. Laboratory control samples</b>				
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 80-120% QC limits for water samples and laboratory established QC limits for soils?	/			



Validation Area	Yes	No	NA	Findings/Comments
<b>VIII. Furnace Atomic Absorption QC</b>				
If MSA was performed, was the correlation coefficients > 0.995?			/	
Do all applicable analyses have duplicate injections? (Level IV only)			/	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			/	
Were analytical spike recoveries within the 85-115% QC limits?			/	
<b>IX. ICP Serial Dilution</b>				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	/			
Were all percent differences (%Ds) < 10%?	/			
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			/	
<b>X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)</b>				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	/			
If the %Rs were outside the criteria, was a reanalysis performed?			/	
<b>XI. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>XII. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.	/			
Target analytes were detected in the field duplicates.	/			
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target analytes were detected in the field blanks.	/			



All circled elements are applicable to each sample.

[illegible]

Comments: Mercury by CVAA if performed



## PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: al

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

Soil preparation factor applied: 100x

Reason: B

2nd Reviewer: su

Sample Concentration units, unless otherwise noted: mg/Kg

Associated Samples: All

					Sample Identification									
Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (µg/l)	Maximum ICB/CCB <sup>a</sup> (µg/l)	Action Level	1	2	3	4						
Ca	<del>4.84</del> 4.838			24.19										
Mg	<del>2.30</del> 2.298			11.49										
Mo			2.9	1.45	0.998	0.561	0.396	0.630						
Sn	<del>1.63</del> 1.627			8.135	2.85	2.85	3.49	3.68						
Ti			2.5	1.45										
Tl			0.21	0.21		0.204								
Zn	0.233			1.165										

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

					Sample Identification									
Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (µg/l)	Maximum ICB/CCB <sup>a</sup> (µg/l)	Action Level	No Qualifiers									
Mg			38.0	19										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note: a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.



# VALIDATION FINDINGS WORKSHEET Field Blanks

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

Blank units: mg/L Associated sample units: mg/Kg Reason: F

Sampling date: 4/16/13 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-041613 (SDG: PH032)	Action Limit	1	2	3	4							
Mo	0.0132	6.60	0.998	0.561	0.396	0.630							
Sn	0.0029	1.45											

Sampling date: 12/5/13 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 3, 4

Analyte	Blank ID	Sample Identification											
	EB2-120513 (SDG: PH140)	Action Limit	No Qualifiers										
Zn	0.0048	2.4											

Sampling date: 12/5/13 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 1, 2

Analyte	Blank ID	Sample Identification											
	EB3-120513 (SDG: PH140)	Action Limit	No Qualifiers										
Zn	0.0062	3.1											

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".



**METHOD:** Trace metals (EPA SW 846 Method 6010B/6020A/7000)

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

Y N N/A

Was a matrix spike analyzed for each matrix in this SDG?

Y/N N/A

Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a fact of 4 or more, no action was taken.

QY N N/A

Were all duplicate sample relative percent differences (RPD)  $\leq 20\%$  for water samples and  $\leq 35\%$  for soil samples?

**LEVEL IV ONLY:**

Y N N/A

Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments:

Al, Ca, Fe, Mg, Mn, P, Ti 74x: Text



VALIDATION FINDINGS WORKSHEET  
Field Duplicates

Method: Metals

Analyte	Concentration (mg/Kg)		RPD (≤ 50)	Qualifiers (Parents Only)
	1	2		
Aluminum	12100	11800	3	
Arsenic	3.24	2.90	11	
Barium	71.5	77.1	8	
Beryllium	0.477	0.466	2	
Boron	4.79	5.57	14.15	
Cadmium	0.447	0.466	4	
Calcium	5070	5200	3	
Chromium	16.7	17.7	6	
Cobalt	4.80	4.62	4	
Copper	4.81	4.80	0	
Iron	18500	18000	3	
Lead	14.8	15.1	2	
Lithium	22.7	22.0	3	
Magnesium	4240	4070	4	
Manganese	283	273	4	
Mercury	0.182	0.284	44	
Molybdenum	0.998	0.561	56	Jdet/A (FD)
Nickel	10.7	10.3	4	
Phosphorus	431	372	15	
Potassium	3490	3070	13	
Selenium	0.203	0.189	7	
Silver	0.201	0.233	15	
Sodium	78.3	92.1	16	
Strontium	25.3	29.2	14	
Thallium	0.213	0.204	4	
Tin	2.85	2.85	0	
Titanium	1010	1010	0	
Vanadium	31.2	29.6	5	
Zinc	57.2	63.6	11	
Zirconium	1.66	2.00	19	

APL  
2/21/14



LDC #: 31224B4

# VALIDATION FINDINGS WORKSHEET Level IV Recalculation Worksheet

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

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

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation,  
Found = SSR (spiked sample result) - SR (sample result).  
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration  
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (mg/L)  
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD / %D	%R / RPD / %D	
ICSAB	ICP interference check	Cu	528.9	500	105.8	105.8	Y
LCS	Laboratory control sample	Hg	0.1	0.1	100	100	
5	Matrix spike	Sb	(SSR-SR) 30.7735	49.0196	63	63	
7	Duplicate	Ba	66.1333	63.8245	4	4	
1	ICP serial dilution	Sr	119.5	120.8	1	1	

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



LDC #: 31264131

## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

Page: 1 of 1

Reviewer: CR

2nd reviewer: 8u

**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

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

Y N N/A Have results been reported and calculated correctly?

Y	N	N/A	Are results within the calibrated range of the instruments and within the linear range of the ICP?
---	---	-----	--

(Y) N N/A Are all detection limits below the CRDL?

Detected analyte results for Ca were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(\text{RD})(\text{FV})(\text{Dil})}{(\text{In. Vol.})}$$

**Recalculation:**

RD	=	Raw data concentration
FV	=	Final volume (ml)
In. Vol.	=	Initial volume (ml) or weight (G)
Dil	=	Dilution factor

$$r = \frac{100\text{mL}(47.84509\text{mg/L})}{0.925(1.02\text{g})} = 5071\text{mg/kg}$$

[illegible]

Note: \_\_\_\_\_



LDC #: 31224B4

# **VALIDATION FINDINGS WORKSHEET** **Initial and Continuing Calibration Calculation Verification**

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

**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution  
 True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated	Reported	Acceptable (Y/N)
					%R	%R	
ICV	ICP (Initial calibration)	Cr	574.2	600	95.7	95.7	Y
↓	ICP/MS (Initial calibration)	Ag	52.19	50	104.4	104.4	↓
↓	CVAA (Initial calibration)	Hg	2.73	2.5	109.2	109.2	↓
CCV 2	ICP (Continuing calibration)	V	503.23	500	100.6	100.6	↓
↓	ICP/MS (Continuing calibration)	Se	25.78	25	103.1	103.1	↓
↓	CVAA (Continuing calibration)	Hg	1.07	1	107.0	107.0	↓
	GFAA (Initial calibration)						
	GFAA (Continuing calibration)						

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



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 4, 2013  
**LDC Report Date:** February 11, 2014  
**Matrix:** Soil/Water  
**Parameters:** Total Petroleum Hydrocarbons as Gasoline  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH139

**Sample Identification**

SL-507-NBZ-SB-3.5-4.5  
SL-508-NBZ-SB-4.0-5.0  
TB-120413  
SL-511-NBZ-SB-2.5-3.5



## Introduction

This data review covers 3 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for all compounds were less than or equal to 20.0%

## **III. Calibration Verification**

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-120413 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No total petroleum hydrocarbons as gasoline contaminants were found.

## **V. Surrogate Recovery**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

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

## **VII. Laboratory Control Samples**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.



### **VIII. Target Compound Identification**

All target compound identifications were within validation criteria.

### **IX. Compound Quantitation**

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 PH139	All compounds reported below the RL.	J (all detects)	A

### **X. System Performance**

The system performance was acceptable.

### **XI. Overall Assessment of Data**

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

### **XII. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG PH139**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH139	SL-507-NBZ-SB-3.5-4.5 SL-508-NBZ-SB-4.0-5.0 TB-120413 SL-511-NBZ-SB-2.5-3.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG



LDC #: 31224B7 **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH139

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 2/6/14

Page: 1 of 1

Reviewer: OR

2nd Reviewer: SM

**METHOD:** GC TPH as Gasoline (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/4/13
II.	Initial calibration	A	RSD ≤ 20%
III.	Calibration verification/ICV	A	1M CCV = 20%
IV.	Blanks	A	
V.	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client spec.
VII.	Laboratory control samples	A	Less/D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	TB = 3 FB = FB-041613

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

(SDG # PH132)  
D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples: Soil + Water

1	SL-507-NBZ-SB-3.5-4.5	11	21	31	B2KAH
2	SL-508-NBZ-SB-4.0-5.0	12	22	32	B2K9D
3	TB-120413 W	13	23	33	
4	SL-511-NBZ-SB-2.5-3.5	14	24	34	
5		15	25	35	
6		16	26	36	
7		17	27	37	
8		18	28	38	
9		19	29	39	
10		20	30	40	

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Method: ☒ GC ☐ HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) $\leq 20\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Continuing calibration</b>				
What type of continuing calibration calculation was performed? <input checked="" type="checkbox"/> %D or <input type="checkbox"/> %R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 20\%$ or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



LDC #: 3122487

## VALIDATION FINDINGS CHECKLIST

Page: 2 of 2  
Reviewer: BR  
2nd Reviewer: SM

Validation Area	Yes	No	NA	Findings/Comments
<b>IX: Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>X: Target compound identification</b>				
Were the retention times of reported detects within the RT windows?	/			
<b>XI: Compound quantitation/CRQLs</b>				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
<b>XII: System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII: Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV: Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
<b>XV: Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target compounds were detected in the field blanks.		/		



LDC #: 31224B7

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page 1 of 1Reviewer: BR2nd Reviewer: SmMETHOD: GC X HPLC \_\_\_\_\_

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C

average CF = sum of the CF/number of standards

%RSD = 100 \* (S/X)

Where:

A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors


#	Standard ID	Calibration Date	Compound	Reported CF (550 std)	Recalculated CF (550 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL 11379F J&W DB-MTB	9/27/2013	GRO	53902	53902	55635	55635	4	4

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



LDC #: 31224B7

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page 1 of 1Reviewer: BR2nd Reviewer: METHOD: GC X HPLC       

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C

average CF = sum of the CF/number of standards

%RSD = 100 \* (S/X)

Where:

A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

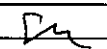
#	Standard ID	Calibration Date	Compound	Reported CF (550 std)	Recalculated CF (550 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL 16394F Restek VRX	10/8/2013	GRO	28604	28604	28046	28046	6	6

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



LDC #: 31224B7

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

Page: ( of 1  
Reviewer: BR  
2nd Reviewer: 

METHOD: GC \_\_\_\_\_ HPLC \_\_\_\_\_

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

Percent difference (%D) =  $100 * (N - C)/N$ 

Where:

N = Initial Calibration Factor or Nominal Amount

C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc/CF	Reported Conc/CF	Recalculated Conc/CF	Reported % D	Recalculated %D
1	SGCKXGK	12/16/2013	GRO	220.04	209.72	209.72	5	5
	11379F	16:40						
2	WGCCXUS	12/6/2013	GRO	550.00	539.15	539.15	2	2
	16394F	10:19						
3								

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



LDC #: 3122487VALIDATION FINDINGS WORKSHEET  
Surrogate Results VerificationPage: 1 of 1Reviewer: BR2nd reviewer: SMMETHOD: X GC    HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery:  $SF/SS * 100$ Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: 1

Surrogate	<u>Column/Detector</u>	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Trifluorotoluene	JW DB-MTB	781.2	632.7919	81	81	0

Sample ID: 3

Surrogate	<u>Column/Detector</u>	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Trifluorotoluene	Keetek VME	30	26.4863	88	88	0

Sample ID:           

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 3122487

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: BR2nd Reviewer: SmMETHOD: X GC    HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

$$\text{RPD} = (((\text{SSCLCS} - \text{SSCLCSD}) * 2) / (\text{SSCLCS} + \text{SSCLCSD})) * 100$$

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCSQ8 / LCSDFA

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	11	9.16	9.52	83	83	87	87	4	4
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 3122487VALIDATION FINDINGS WORKSHEET  
Sample Calculation VerificationPage: 1 of 1  
Reviewer: BR  
2nd Reviewer: suMETHOD: ☒ GC ☐ HPLC☒ Y ☐ N ☐ N/A  
☒ Y ☐ N ☐ N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration=  $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$ 

Example:

Sample ID. 1 Compound Name GRD

0.6 mg/kg

A= Area or height of the compound to be measured

Fv= Final Volume of extract

Df= Dilution Factor

RF= Average response factor of the compound  
in the initial calibration

Vs= Initial volume of the sample

Ws= Initial weight of the sample

%S= Percent Solid

$$\text{Concentration} = \frac{(3165391 - 2718446)(25)}{(55635)(1)(0.936)(1000)}$$
$$= 0.602477399 \text{ mg/kg}$$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** December 4, 2013

**LDC Report Date:** February 10, 2014

**Matrix:** Soil

**Parameters:** Cyanide

**Validation Level:** Level IV

**Laboratory:** Eurofins Lancaster Laboratories

**Sample Delivery Group (SDG):** PH139

**Sample Identification**

SL-545-NBZ-SB-0.0-0.5

SL-845-NBZ-SB-0.0-0.5

SL-545-NBZ-SB-0.0-0.5MS

SL-545-NBZ-SB-0.0-0.5DUP



## 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 9012B for Cyanide.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

All criteria for the initial calibration were met.

## **III. Continuing Calibration**

Continuing calibration frequency and analysis criteria were met.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Sample EB3-120513 (from SDG PH140) was identified as an equipment blank. No contaminant concentrations were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No contaminant concentrations were found.

## **V. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

## **VI. Duplicates**

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## **VII. Laboratory Control Samples**

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

## **VIII. Sample Result Verification**

All sample result verifications were acceptable.

All analytes reported below the RL and above the MDL were qualified as follows:



Sample	Analyte	Flag	A or P
All samples in SDG PH139	All analytes reported below the RL and above the MDL.	J (all detects)	A

## IX. Overall Assessment of Data

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

## X. Field Duplicates

Samples SL-545-NBZ-SB-0.0-0.5 and SL-845-NBZ-SB-0.0-0.5 were identified as field duplicates. No contaminant concentrations were detected in any of the samples.



**Santa Susana Field Laboratory**  
**Cyanide - Data Qualification Summary - SDG PH139**

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
PH139	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

**Santa Susana Field Laboratory**  
**Cyanide - Laboratory Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Cyanide - Field Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG



**METHOD: (Analyte)** Cyanide (EPA SW846 Method 9012B)

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: 12/4/13
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV.	Matrix Spike/Matrix Spike Duplicates	A	MS
V.	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	ND	(1,2)
X.	Field blanks	ND	EB = EB3-120513 FB = FB-011613 (PH140) (PH032)

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-545-NBZ-SB-0.0-0.5	11		21		31	
2	SL-845-NBZ-SB-0.0-0.5	12		22		32	
3	SL-545-NBZ-SB-0.0-0.5MS	13		23		33	
4	SL-545-NBZ-SB-0.0-0.5DUP	14		24		34	
5	SL-545-NBZ-SB-0.0-0.5MS	15		25		35	
6	SL-545-NBZ-SB-0.0-0.5DUP	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:



Method: Inorganics (EPA Method *See cover*)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	/			
Were the proper number of standards used?	/			
Were all initial calibration correlation coefficients > 0.995?	/			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	/			
Were titrant checks performed as required? (Level IV only)			/	
Were balance checks performed as required? (Level IV only)				
<b>III. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>IV. Matrix spike/Matrix spike duplicates and Duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	/			
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\leq \text{CRDL} (\leq 2X \text{ CRDL for soil})$ was used for samples that were $\leq 5X$ the CRDL, including when only one of the duplicate sample values were $\leq 5X$ the CRDL.	/			
<b>V. Laboratory control samples</b>				
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 80-120% (85-115% for Method 300.0) QC limits?	/			
<b>VI. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	



LDC #: 31224B6

## VALIDATION FINDINGS CHECKLIST

Page: 2 of 2  
Reviewer: OL  
2nd Reviewer: SM

Validation Area	Yes	No	NA	Findings/Comments
<b>VII. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were detection limits < RL?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>VIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IX. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target analytes were detected in the field duplicates.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>X. Field blanks</b>				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Target analytes were detected in the field blanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



LDC #: 31224BVALIDATION FINDINGS WORKSHEET  
Level IV Recalculation WorksheetPage: 1 of 1  
Reviewer: GR  
2nd Reviewer: SMMETHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{\text{Found}}{\text{True}} \times 100$       Where,      Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).  
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$       Where,      S = Original sample concentration  
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD	%R / RPD	
LCS	Laboratory control sample	CN	9.94	10	99	99	Y
3	Matrix spike sample	↓	(SSR-SR) 5.25	4.88	108	108	↓
4	Duplicate sample	↓	ND	0.23	200	200	↓

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



LDC #: 31224B36

**Validation Findings Worksheet**  
**Initial and Continuing Calibration Calculation Verification**

Page: 1 of 1  
 Reviewer: AL  
 2nd Reviewer: DR

Method: Inorganics, Method See CoverThe correlation coefficient (r) for the calibration of CN was recalculated. Calibration date: 12/16/13

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found} \times 100}{\text{True}}$$

Where,

Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated	Reported	Acceptable (Y/N)
					r or r <sup>2</sup>	r or r <sup>2</sup>	
Initial calibration	CN	s1	0.0	0.4098	0.99999	0.99999	Y
		s2	0.02	0.4842			
		s3	0.05	0.7169			
		s4	0.1	1.0929			
		s5	0.2	1.8409			
		s6	0.35	2.9826			
Calibration verification	↓	ICV	0.15	0.1554	104	104	Y
Calibration verification	↙	CCV	↓	0.15710	105	105	Y
Calibration verification							

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



LDC #: 31224 B6

### Sample Calculation Verification

Reviewer: AR

2nd reviewer: Sam

METHOD: Inorganics, Method See cover

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

Have results been reported and calculated correctly?

Are results within the calibrated range of the instruments?

Are all detection limits below the CRQL?

Compound (analyte) results for \_\_\_\_\_ reported with a positive detect were recalculated and verified using the following equation:

**Recalculation:**

Non Detect.

[illegible]

Note: \_\_\_\_\_



## Laboratory Data Consultants, Inc. Data Validation Report

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 4, 2013  
**LDC Report Date:** February 10, 2014  
**Matrix:** Soil  
**Parameters:** Total Petroleum Hydrocarbons as Extractables  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories

**Sample Delivery Group (SDG):** PH139

### Sample Identification

SL-506-NBZ-SB-0.0-0.5  
SL-507-NBZ-SB-0.0-0.5  
SL-507-NBZ-SB-3.5-4.5  
SL-508-NBZ-SB-0.0-0.5  
SL-508-NBZ-SB-4.0-5.0  
SL-546-NBZ-SB-0.0-0.5  
SL-547-NBZ-SB-0.0-0.5  
SL-549-NBZ-SB-0.0-0.5  
SL-545-NBZ-SB-0.0-0.5  
SL-845-NBZ-SB-0.0-0.5  
SL-511-NBZ-SB-0.0-0.5  
SL-511-NBZ-SB-2.5-3.5  
SL-548-NBZ-SB-0.0-0.5  
SL-545-NBZ-SB-0.0-0.5MS  
SL-545-NBZ-SB-0.0-0.5MSD



## Introduction

This data review covers 15 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

## **III. Calibration Verification**

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractables contaminants were found in the method blanks.

Samples EB1-120513, EB2-120513, and EB3-120513 (all from SDG PH140) were identified as equipment blanks. No total petroleum hydrocarbons as extractables contaminants were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No total petroleum hydrocarbons as extractables contaminants were found.

## **V. Surrogate Recovery**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since the samples were diluted out, no data were qualified.

## **VII. Laboratory Control Samples**

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



### VIII. Target Compound Identification

All target compound identifications were within validation criteria.

### IX. Compound Quantitation

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 PH139	All compounds reported below the RL.	J (all detects)	A

### X. System Performance

The system performance was acceptable.

### XI. Overall Assessment of Data

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

### XII. Field Duplicates

Samples SL-545-NBZ-SB-0.0-0.5 and SL-845-NBZ-SB-0.0-0.5 were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
EFH (C15-C20)	35	33	6 (≤50)	-	-
EFH (C21-C30)	150	200	29 (≤50)	-	-
EFH (C30-C40)	370	460	22 (≤50)	-	-



**Santa Susana Field Laboratory  
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary -  
SDG PH139**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH139	SL-506-NBZ-SB-0.0-0.5 SL-507-NBZ-SB-0.0-0.5 SL-507-NBZ-SB-3.5-4.5 SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-546-NBZ-SB-0.0-0.5 SL-547-NBZ-SB-0.0-0.5 SL-549-NBZ-SB-0.0-0.5 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5 SL-548-NBZ-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory  
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data  
Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory  
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification  
Summary - SDG PH139**

No Sample Data Qualified in this SDG



LDC #: 31224B8 **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH139

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 2/7/14

Page: 1 of 1

Reviewer: BK

2nd Reviewer: SM

**METHOD:** GC TPH as Extractables (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/4/13
II.	Initial calibration	A	RSD ≤ 20%
III.	Calibration verification/ICV	A	100% CCV ≤ 20%
IV.	Blanks	A	
V.	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW	FD = 9 + 10
XIII.	Field blanks	ND	EB1 = EB1-120513 EB2 = EB2-120513 EB3 = EB3-120513 All EBs from SD6 # PH140

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 (SD6 # PH032)

Validated Samples: Sol

1	SL-506-NBZ-SB-0.0-0.5	11	SL-511-NBZ-SB-0.0-0.5	21		31	POK-21345
2	SL-507-NBZ-SB-0.0-0.5	12	SL-511-NBZ-SB-2.5-3.5	22		32	
3	SL-507-NBZ-SB-3.5-4.5	13	SL-548-NBZ-SB-0.0-0.5	23		33	
4	SL-508-NBZ-SB-0.0-0.5	14	SL-545-NBZ-SB-0.0-0.5MS	24		34	
5	SL-508-NBZ-SB-4.0-5.0	15	SL-545-NBZ-SB-0.0-0.5MSD	25		35	
6	SL-546-NBZ-SB-0.0-0.5	16		26		36	
7	SL-547-NBZ-SB-0.0-0.5	17		27		37	
8	SL-549-NBZ-SB-0.0-0.5	18		28		38	
9	SL-545-NBZ-SB-0.0-0.5	19		29		39	
10	SL-845-NBZ-SB-0.0-0.5	20		30		40	

Notes:



LDC #: 3122488

## VALIDATION FINDINGS CHECKLIST

Page: 1 of 2  
Reviewer: BR  
2nd Reviewer: SAMethod: X GC        HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) $\leq$ 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Continuing calibration</b>				
What type of continuing calibration calculation was performed? <u>X</u> %D or <u>      </u> %R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq$ 20% or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>V. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VI. Matrix spike/Matrix spike/duplicates</b>				
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Validation Area	Yes	No	NA	Findings/Comments
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>X. Target compound identification</b>				
Were the retention times of reported detects within the RT windows?	/			
<b>XI. Compound quantitation/CRQLs</b>				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
<b>XII. System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.	/			
Target compounds were detected in the field duplicates.	/			
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target compounds were detected in the field blanks.		/		



LDC #: 31224B8

### VALIDATION FINDINGS WORKSHEET

#### Matrix Spike/Matrix Spike Duplicates

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

METHOD: X GC    HPLC

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

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y	N	N/A	Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
---	---	-----	--

Y ☒ N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

[illegible]



LDC #: 31224B8SDG #: Sec crop

## VALIDATION FINDINGS WORKSHEET

Field DuplicatesPage: 1 of 1Reviewer: BK2nd reviewer: SMMETHOD: ☒ GC ☐ HPLC☐ Y ☐ N ☐ N/A Were field duplicate pairs identified in this SDG?☐ Y ☐ N ☐ N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration ( <u>mg/kg</u> )		%RPD Limit <u>50</u>	Qualification
	<u>9</u>	<u>10</u>		Parent only / All Samples
EPH (C15-C20)	35	33	6	
EPH (C21-C30)	150	200	29	
EPH (C30-C40)	370	460	22	

Compound	Concentration ( )		%RPD Limit _____	Qualification
				Parent only / All Samples

Compound	Concentration ( )		%RPD Limit _____	Qualification
				Parent only / All Samples

Compound	Concentration ( )		%RPD Limit _____	Qualification
				Parent only / All Samples

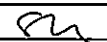


LDC #: 31224B8

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page 1 of 1

Reviewer: BR

2nd Reviewer: 

METHOD: GC X HPLC \_\_\_\_\_

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

$CF = A/C$

average CF = sum of the CF/number of standards

$\%RSD = 100 * (S/X)$

Where:

A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (144 std)	Recalculated CF (144 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL CP23-19879A ZB-5	12/2/2013	C8-C40	22576	22576	22983	22983	7%	7%

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



LDC #: 31224B8

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

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

METHOD: GC\_\_\_\_HPLC\_\_\_\_

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

Percent difference (%D) =  $100 * (N - C) / N$ 

Where:

N = Initial Calibration Factor or Nominal Amount

C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc/CF	Reported Conc/CF	Recalculated Conc/CF	Reported % D	Recalculated %D
1	TPH_3FH	12/12/2013	C8-C40	288.01	313.75	313.75	9	9
	J345.0067	20:54						
2	TPH_3FI	12/13/2013	C8-C40	288.01	307.05	307.65	7	7
	J345.0081	1:57						
3	TPH_3FO	12/13/2013	C8-C40	288.01	317.49	317.49	10	10
	J347.0004	18:24						

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



LDC #: 3122488VALIDATION FINDINGS WORKSHEET  
Surrogate Results VerificationPage: 1 of 1Reviewer: BR2nd reviewer: SMMETHOD: ☒ GC ☐ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Chlorobenzene	ZB5	2.0	2.037959	102	102	0
Orthoterphenyl		↓	2.068881	103	103	0

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: \_\_\_\_\_

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 3122488

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

Page: 1 of 1Reviewer: BR2nd Reviewer: SmMETHOD: X GC    HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where

SSC = Spiked sample concentration

MS = Matrix spike

SC = Sample concentration

MSD = Matrix spike duplicate

$$\text{RPD} = (((\text{SSCMS} - \text{SSCMSD}) * 2) / (\text{SSCMS} + \text{SSCMSD})) * 100$$

SA = Spike added

MS/MSD samples: 14/15

Compound	Spike Added (                    )		Sample Conc. (                    )	Spike Sample Concentration (                    )		Matrix spike		Matrix Spike Duplicate		MS/MSD	
						Percent Recovery		Percent Recovery		RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline .                    (8015)											
Diesel                    (8015)											
Benzene                    (8021B)											
Methane                    (RSK-175)											
2,4-D                    (8151)											
Dinoseb                    (8151)											
Naphthalene                    (8310)											
Anthracene                    (8310)											
HMX                    (8330)											
2,4,6-Trinitrotoluene (8330)											
C <sub>30</sub> -C <sub>40</sub>	15	15	340.21	282.1	377.47	386	387.4	248	248	29	29

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 #: 3122488

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: BR2nd Reviewer: PSMETHOD: X GC    HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery =  $100 * (SSC - SC) / SA$ 

Where SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

RPD =  $((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD) * 100$ 

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS2134S

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH C30-C40	15	-	8.58	-	57	57.2	-	-	-	-

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 3122488VALIDATION FINDINGS WORKSHEET  
Sample Calculation VerificationPage: 1 of 1  
Reviewer: BR  
2nd Reviewer: SMMETHOD: ☒ GC ☐ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?  
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

EFH C30-C40 = 13mg  
Fg

Concentration =  $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$ 

Example:

Sample ID. 1 Compound Name C30-C40

A= Area or height of the compound to be measured  
Fv= Final Volume of extract  
Df= Dilution Factor  
RF= Average response factor of the compound  
In the initial calibration  
Vs= Initial volume of the sample  
Ws= Initial weight of the sample  
%S= Percent Solid

Concentration =  $\frac{(8310603)(17)}{(22983)(30)(0.956)}$   
= 12.60801371 mg/lgr

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## **Laboratory Data Consultants, Inc. Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 4, 2013  
**LDC Report Date:** February 11, 2014  
**Matrix:** Soil  
**Parameters:** Dioxins/Dibenzofurans  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH139

### **Sample Identification**

SL-508-NBZ-SB-0.0-0.5  
SL-508-NBZ-SB-4.0-5.0  
SL-545-NBZ-SB-0.0-0.5  
SL-845-NBZ-SB-0.0-0.5  
SL-511-NBZ-SB-0.0-0.5  
SL-511-NBZ-SB-2.5-3.5  
SL-548-NBZ-SB-0.0-0.5  
SL-545-NBZ-SB-0.0-0.5MS  
SL-545-NBZ-SB-0.0-0.5MSD



## Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA 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 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
BLK347003	12/13/13	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0842 ng/Kg 0.186 ng/Kg 0.164 ng/Kg 0.174 ng/Kg 0.220 ng/Kg 0.255 ng/Kg 0.606 ng/Kg 0.0670 ng/Kg 0.219 ng/Kg 0.287 ng/Kg 0.187 ng/Kg 0.183 ng/Kg 0.271 ng/Kg 0.333 ng/Kg 0.219 ng/Kg 0.237 ng/Kg 0.588 ng/Kg	All samples in SDG PH139

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-508-NBZ-SB-0.0-0.5	2,3,7,8-TCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.112 ng/Kg 0.0429 ng/Kg 0.0747 ng/Kg 0.0602 ng/Kg 0.120 ng/Kg 0.486 ng/Kg 0.122 ng/Kg 0.107 ng/Kg 0.131 ng/Kg 0.0919 ng/Kg 0.0630 ng/Kg 0.0919 ng/Kg 0.126 ng/Kg 0.119 ng/Kg 0.106 ng/Kg 0.328 ng/Kg	0.112U ng/Kg 0.0429U ng/Kg 0.0747U ng/Kg 0.0602U ng/Kg 0.120U ng/Kg 0.486U ng/Kg 0.122U ng/Kg 0.107U ng/Kg 0.131U ng/Kg 0.0919U ng/Kg 0.0630U ng/Kg 0.0919U ng/Kg 0.126U ng/Kg 0.119U ng/Kg 0.106U ng/Kg 0.328U ng/Kg
SL-508-NBZ-SB-4.0-5.0	1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-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	0.0656 ng/Kg 0.0377 ng/Kg 0.186 ng/Kg 1.22 ng/Kg 0.107 ng/Kg 0.0722 ng/Kg 0.0629 ng/Kg 0.0401 ng/Kg 0.0565 ng/Kg 0.114 ng/Kg 0.101 ng/Kg 0.0765 ng/Kg 0.322 ng/Kg	0.0656U ng/Kg 0.0377U ng/Kg 0.186U ng/Kg 1.22U ng/Kg 0.107U ng/Kg 0.0722U ng/Kg 0.0629U ng/Kg 0.0401U ng/Kg 0.0565U ng/Kg 0.114U ng/Kg 0.101U ng/Kg 0.0765U ng/Kg 0.322U ng/Kg



Sample	Compound	Reported Concentration	Modified Final Concentration
SL-545-NBZ-SB-0.0-0.5	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0707 ng/Kg 0.269 ng/Kg 0.441 ng/Kg 0.790 ng/Kg 0.878 ng/Kg 0.889 ng/Kg 0.466 ng/Kg 0.470 ng/Kg 0.462 ng/Kg 0.206 ng/Kg 0.363 ng/Kg	0.0707U ng/Kg 0.269U ng/Kg 0.441U ng/Kg 0.790U ng/Kg 0.878U ng/Kg 0.889U ng/Kg 0.466U ng/Kg 0.470U ng/Kg 0.462U ng/Kg 0.206U ng/Kg 0.363U ng/Kg
SL-845-NBZ-SB-0.0-0.5	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0848 ng/Kg 0.688 ng/Kg 0.589 ng/Kg 0.926 ng/Kg 0.995 ng/Kg 0.660 ng/Kg 0.682 ng/Kg 0.727 ng/Kg 0.466 ng/Kg 0.597 ng/Kg	0.0848U ng/Kg 0.688U ng/Kg 0.589U ng/Kg 0.926U ng/Kg 0.995U ng/Kg 0.660U ng/Kg 0.682U ng/Kg 0.727U ng/Kg 0.466U ng/Kg 0.597U ng/Kg
SL-511-NBZ-SB-0.0-0.5	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0866 ng/Kg 0.0648 ng/Kg 0.300 ng/Kg 0.263 ng/Kg 0.325 ng/Kg 0.169 ng/Kg 0.377 ng/Kg 0.165 ng/Kg 0.150 ng/Kg 0.176 ng/Kg 0.152 ng/Kg 0.569 ng/Kg 0.0983 ng/Kg 0.821 ng/Kg	0.0866U ng/Kg 0.0648U ng/Kg 0.300U ng/Kg 0.263U ng/Kg 0.325U ng/Kg 0.169U ng/Kg 0.377U ng/Kg 0.165U ng/Kg 0.150U ng/Kg 0.176U ng/Kg 0.152U ng/Kg 0.569U ng/Kg 0.0983U ng/Kg 0.821U ng/Kg
SL-511-NBZ-SB-2.5-3.5	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.157 ng/Kg 0.0507 ng/Kg 0.114 ng/Kg 0.144 ng/Kg 0.196 ng/Kg 0.809 ng/Kg 0.147 ng/Kg 0.203 ng/Kg 0.186 ng/Kg 0.112 ng/Kg 0.0967 ng/Kg 0.0897 ng/Kg 0.123 ng/Kg 0.105 ng/Kg 0.0526 ng/Kg 0.217 ng/Kg	0.157U ng/Kg 0.0507U ng/Kg 0.114U ng/Kg 0.144U ng/Kg 0.196U ng/Kg 0.809U ng/Kg 0.147U ng/Kg 0.203U ng/Kg 0.186U ng/Kg 0.112U ng/Kg 0.0967U ng/Kg 0.0897U ng/Kg 0.123U ng/Kg 0.105U ng/Kg 0.0526U ng/Kg 0.217U ng/Kg



Sample	Compound	Reported Concentration	Modified Final Concentration
SL-548-NBZ-SB-0.0-0.5	2,3,7,8-TCDD	0.115 ng/Kg	0.115U ng/Kg
	1,2,3,7,8-PeCDD	0.194 ng/Kg	0.194U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0513 ng/Kg	0.0513U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0726 ng/Kg	0.0726U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0822 ng/Kg	0.0822U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.137 ng/Kg	0.137U ng/Kg
	OCDD	0.438 ng/Kg	0.438U ng/Kg
	2,3,7,8-TCDF	0.123 ng/Kg	0.123U ng/Kg
	1,2,3,7,8-PeCDF	0.249 ng/Kg	0.249U ng/Kg
	2,3,4,7,8-PeCDF	0.202 ng/Kg	0.202U ng/Kg
	1,2,3,4,7,8-HxCDF	0.103 ng/Kg	0.103U ng/Kg
	1,2,3,6,7,8-HxCDF	0.102 ng/Kg	0.102U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0735 ng/Kg	0.0735U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0965 ng/Kg	0.0965U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.109 ng/Kg	0.109U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0269 ng/Kg	0.0269U ng/Kg
	OCDF	0.180 ng/Kg	0.180U ng/Kg

Samples EB1-120513, EB2-120513, and EB3-120513 (all from SDG PH140) were identified as equipment blanks. No polychlorinated dioxin/dibenzofuran contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB1-120513	12/5/13	OCDD	1.48 pg/L	SL-508-NBZ-SB-0.0-0.5
		1,2,3,7,8-PeCDF	0.646 pg/L	SL-508-NBZ-SB-4.0-5.0
		1,2,3,6,7,8-HxCDF	0.488 pg/L	SL-548-NBZ-SB-0.0-0.5
		1,2,3,4,6,7,8-HpCDF	0.815 pg/L	
		1,2,3,4,7,8,9-HpCDF	0.583 pg/L	
EB2-120513	12/5/13	OCDD	1.88 pg/L	SL-511-NBZ-SB-0.0-0.5
		2,3,4,7,8-PeCDF	0.627 pg/L	SL-511-NBZ-SB-2.5-3.5
EB3-120513	12/5/13	1,2,3,7,8-PeCDD	0.635 pg/L	SL-545-NBZ-SB-0.0-0.5
		1,2,3,7,8,9-HxCDD	0.353 pg/L	SL-845-NBZ-SB-0.0-0.5
		1,2,3,4,6,7,8-HpCDD	0.436 pg/L	
		OCDD	19.6 pg/L	
		1,2,3,7,8-PeCDF	0.499 pg/L	
		2,3,4,7,8-PeCDF	0.244 pg/L	
		1,2,3,4,7,8-HxCDF	0.225 pg/L	
		1,2,3,6,7,8-HxCDF	0.118 pg/L	
		1,2,3,7,8,9-HxCDF	0.390 pg/L	
		1,2,3,4,6,7,8-HpCDF	0.380 pg/L	
		1,2,3,4,7,8,9-HpCDF	0.446 pg/L	
		OCDF	1.02 pg/L	

Sample FB-041613 (from SDG PH032) 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-041613	4/16/13	1,2,3,7,8-PeCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,7,8,9-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF OCDF	0.434 pg/L 0.309 pg/L 0.838 pg/L 0.324 pg/L 0.429 pg/L 0.257 pg/L 0.241 pg/L 0.284 pg/L 0.314 pg/L 0.357 pg/L	All samples in SDG PH139

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

#### VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within the QC limits.

#### VII. Ongoing Precision Recovery (OPR)

Ongoing precision recovery samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within 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.

The 2,3,7,8-TCDF confirmation was performed with the following exceptions:



Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG PH139	2,3,7,8-TCDF	2nd column confirmation was not performed for this compound.	2,3,7,8-TCDF 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 PH139	All compounds reported below the RL.	J (all detects)	A

## XII. System Performance

The system performance was acceptable.

## XIII. Overall Assessment of Data

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

## XIV. Field Duplicates

Samples SL-545-NBZ-SB-0.0-0.5 and SL-845-NBZ-SB-0.0-0.5 were identified as field duplicates. No polychlorinated dioxins/dibenzofurans were detected in any of the samples with the following exceptions:

Compound	Concentration (pg/g)		RPD (Limits)	Flag	A or P
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
2,3,7,8-TCDD	0.0707	0.0848	18 (≤50)	-	-
1,2,3,7,8-PeCDD	0.269	0.688	88 (≤50)	J (all detects)	A
1,2,3,4,7,8-HxCDD	0.441	0.589	29 (≤50)	-	-
1,2,3,6,7,8-HxCDD	1.04	1.10	6 (≤50)	-	-
1,2,3,7,8,9-HxCDD	0.790	0.926	16 (≤50)	-	-
1,2,3,4,6,7,8-HpCDD	17.3	13.2	27 (≤50)	-	-
OCDD	142	106	29 (≤50)	-	-
2,3,7,8-TCDF	0.622	0.487	24 (≤50)	-	-



Compound	Concentration (pg/g)		RPD (Limits)	Flag	A or P
	SL-545-NBZ-SB-0.0-0.5	SL-845-NBZ-SB-0.0-0.5			
1,2,3,7,8-PeCDF	0.878	1.13	25 (≤50)	-	-
2,3,4,7,8-PeCDF	0.889	0.995	11 (≤50)	-	-
1,2,3,4,7,8-HxCDF	0.466	0.660	34 (≤50)	-	-
1,2,3,6,7,8-HxCDF	0.470	0.682	37 (≤50)	-	-
2,3,4,6,7,8-HxCDF	0.462	0.727	45 (≤50)	-	-
1,2,3,7,8,9-HxCDF	0.206	0.466	77 (≤50)	J (all detects)	A
1,2,3,4,6,7,8-HpCDF	3.75	4.26	13 (≤50)	-	-
1,2,3,4,7,8,9-HpCDF	0.363	0.597	49 (≤50)	-	-
OCDF	8.97	8.17	9 (≤50)	-	-



**Santa Susana Field Laboratory**  
**Dioxins/Dibenzofurans - Data Qualification Summary - SDG PH139**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH139	SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5 SL-548-NBZ-SB-0.0-0.5	2,3,7,8-TCDF	None	P	Compound quantitation (column confirmation)
PH139	SL-508-NBZ-SB-0.0-0.5 SL-508-NBZ-SB-4.0-5.0 SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-0.0-0.5 SL-511-NBZ-SB-2.5-3.5 SL-548-NBZ-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)
PH139	SL-545-NBZ-SB-0.0-0.5 SL-845-NBZ-SB-0.0-0.5	1,2,3,7,8-PeCDD 1,2,3,7,8,9-HxCDF	J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)

**Santa Susana Field Laboratory**  
**Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG PH139**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH139	SL-508-NBZ-SB-0.0-0.5	2,3,7,8-TCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.112U ng/Kg 0.0429U ng/Kg 0.0747U ng/Kg 0.0602U ng/Kg 0.120U ng/Kg 0.486U ng/Kg 0.122U ng/Kg 0.107U ng/Kg 0.131U ng/Kg 0.0919U ng/Kg 0.0630U ng/Kg 0.0919U ng/Kg 0.126U ng/Kg 0.119U ng/Kg 0.106U ng/Kg 0.328U ng/Kg	A	B
PH139	SL-508-NBZ-SB-4.0-5.0	1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-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	0.0656U ng/Kg 0.0377U ng/Kg 0.186U ng/Kg 1.22U ng/Kg 0.107U ng/Kg 0.0722U ng/Kg 0.0629U ng/Kg 0.0401U ng/Kg 0.0565U ng/Kg 0.114U ng/Kg 0.101U ng/Kg 0.0765U ng/Kg 0.322U ng/Kg	A	B



SDG	Sample	Compound	Modified Final Concentration	A or P	Code
PH139	SL-545-NBZ-SB-0.0-0.5	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0707U ng/Kg 0.269U ng/Kg 0.441U ng/Kg 0.790U ng/Kg 0.878U ng/Kg 0.889U ng/Kg 0.466U ng/Kg 0.470U ng/Kg 0.462U ng/Kg 0.206U ng/Kg 0.363U ng/Kg	A	B
PH139	SL-845-NBZ-SB-0.0-0.5	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0848U ng/Kg 0.688U ng/Kg 0.589U ng/Kg 0.926U ng/Kg 0.995U ng/Kg 0.660U ng/Kg 0.682U ng/Kg 0.727U ng/Kg 0.466U ng/Kg 0.597U ng/Kg	A	B
PH139	SL-511-NBZ-SB-0.0-0.5	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0866U ng/Kg 0.0648U ng/Kg 0.300U ng/Kg 0.263U ng/Kg 0.325U ng/Kg 0.169U ng/Kg 0.377U ng/Kg 0.165U ng/Kg 0.150U ng/Kg 0.176U ng/Kg 0.152U ng/Kg 0.569U ng/Kg 0.0983U ng/Kg 0.821U ng/Kg	A	B
PH139	SL-511-NBZ-SB-2.5-3.5	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.157U ng/Kg 0.0507U ng/Kg 0.114U ng/Kg 0.144U ng/Kg 0.196U ng/Kg 0.809U ng/Kg 0.147U ng/Kg 0.203U ng/Kg 0.186U ng/Kg 0.112U ng/Kg 0.0967U ng/Kg 0.0897U ng/Kg 0.123U ng/Kg 0.105U ng/Kg 0.0526U ng/Kg 0.217U ng/Kg	A	B



SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH139	SL-548-NBZ-SB-0.0-0.5	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.115U ng/Kg 0.194U ng/Kg 0.0513U ng/Kg 0.0726U ng/Kg 0.0822U ng/Kg 0.137U ng/Kg 0.438U ng/Kg 0.123U ng/Kg 0.249U ng/Kg 0.202U ng/Kg 0.103U ng/Kg 0.102U ng/Kg 0.0735U ng/Kg 0.0965U ng/Kg 0.109U ng/Kg 0.0269U ng/Kg 0.180U ng/Kg	A	B

**Santa Susana Field Laboratory**

**Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG PH139**

No Sample Data Qualified in this SDG



LDC #: 31224B21

**VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH139

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 1-31-14

Page: 1 of 1

Reviewer: *gm*2nd Reviewer: *SA***METHOD:** HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/4/13
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	A	
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	A	
XI.	Compound quantitation/RL/LQ/LQDs	SW	
XII.	System performance	A	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	SW	D = 3 + 4
XV.	Field blanks	SW	FB = FB - 041613 (PH032) *

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-508-NBZ-SB-0.0-0.5	11	<del>SL-545-NBZ-SB-0.0-0.5MSD</del>	21		31	
2	SL-508-NBZ-SB-4.0-5.0	12		22		32	
3	SL-545-NBZ-SB-0.0-0.5	13		23		33	
4	SL-845-NBZ-SB-0.0-0.5	14		24		34	
5	SL-511-NBZ-SB-0.0-0.5	15		25		35	
6	SL-511-NBZ-SB-2.5-3.5	16		26		36	
7	SL-548-NBZ-SB-0.0-0.5	17		27		37	
8	SL-545-NBZ-SB-0.0-0.5MS	18		28		38	
9	SL-545-NBZ-SB-0.0-0.5MSD	19		29		39	
10	<del>SL-545-NBZ-SB-0.0-0.5MS</del>	20		30	BLK 347003	40	

Notes: \*EB = EB1-120513 (PH140)  
EB2-120513 (PH140)  
EB3-120513 (PH140)



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

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
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?	/			
<b>III. Initial calibration</b>				
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?	/			
<b>IV. Continuing calibration</b>				
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?	/			
<b>V. Blanks</b>				
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?	/			
<b>VI. Matrix spike/Matrix spike duplicates</b>				
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?	/			
<b>VII. Laboratory control samples</b>				
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
<b>VIII. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>IX. Internal standards</b>				
Were internal standard recoveries within the 25-150% criteria?	/			
Was the minimum S/N ratio of all internal standard peaks $\geq 10$ ?	/			
<b>X. Target compound identification</b>				
For 2,3,7,8 substituted congeners with associated labeled standards, were the retention times of the two quantitation peaks within $\pm 1$ 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 $\geq 2.5$ ?	/			
Does the maximum intensity of each specified characteristic ion coincide within $\pm 2$ seconds (includes labeled standards)?	/			
For PCDF identification, was any signal ( $S/N \geq 2.5$ , at $\pm$ seconds RT) detected in the corresponding PCDF channel?		/		
Was an acceptable lock mass recorded and monitored?	/			
<b>XI. Compound quantitation/CRQLs</b>				
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?	/			
<b>XII. System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.	/			
Target compounds were detected in the field duplicates.	/			
<b>XV. Field blanks</b>				
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: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## VALIDATION FINDINGS WORKSHEET

## Blanks

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

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

Y N N/A

Were all samples associated with a method blank?

Y N N/A

Was a method blank performed for each matrix and whenever a sample extraction was performed?

Y N N/A

Was the method blank contaminated?

Blank extraction date: 12/13/13 Blank analysis date: 12/16/13 Associated samples: All Qual U

Conc. units: ng/kg

Compound	Blank ID	Sample Identification								
	BLK347003	5x	1	2	3	4	5	6	7	
A	0.0842*	0.421	0.112*		0.0707	0.0848*			0.115*	
B	0.186	0.930			0.269*	0.688*	0.0866*	0.157*	0.194*	
C	0.164	0.820	0.0429*		0.441	0.589	0.0648	0.0507*	0.0513*	
D	0.174*	0.870	0.0747*	0.0656			0.300	0.114*	0.0726*	
E	0.220	1.10	0.0602*	0.0377*	0.790	0.926	0.263*	0.144	0.0822*	
F	0.255	1.28	0.120	0.186*				0.196	0.137	
G	0.606	3.03	0.486	1.22				0.809	0.438	
H	0.0670	0.335	0.122*	0.107*			0.325*	0.147*	0.123*	
I	0.219*	1.10	0.107	0.0722*	0.878		0.169*	0.203	0.249	
J	0.287	1.44	0.131*	0.0629*	0.889	0.995	0.377	0.186*	0.202*	
K	0.187*	0.935	0.0919*	0.0401*	0.466	0.660*	0.165	0.112	0.103*	
L	0.183*	0.915	0.0630		0.470	0.682	0.150	0.0967	0.102*	
M	0.271*	1.36	0.0919	0.0565*	0.462	0.727	0.176	0.0897	0.0735*	
N	0.333*	1.67	0.126*	0.114*	0.206	0.466	0.152*	0.123*	0.0965	
O	0.219	1.10	0.119	0.101*			0.569	0.105	0.109	
P	0.237	1.19	0.106	0.0765*	0.363*	0.597	0.0983*	0.0526*	0.0269*	
Q	0.588	2.94	0.328	0.322			0.821*	0.217*	0.180*	

\*EMPC

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".



# **VALIDATION FINDINGS WORKSHEET** **Field Blanks**

**METHOD:** HRGC/HRMS Dioxins (EPA Method 1613B)**Blank units:** pg/L **Associated sample units:** ng/kg**Sampling date:** 12/05/13**Field blank type:** (circle one) Field Blank / Rinsate / Other: EB **Associated Samples:** 1-2, 7 >5x

Compound	Blank ID	Sample Identification								
	EB1-120513	5X								
G	1.48	0.00740								
I	0.646*	0.00323								
L	0.488*	0.00244								
O	0.815*	0.00408								
P	0.583*	0.00292								

\* EMPC

EB1-120513 (PH140)

**Blank units:** pg/L **Associated sample units:** ng/kg**Sampling date:** 12/05/13**Field blank type:** (circle one) Field Blank / Rinsate / Other: EB **Associated Samples:** 5-6 >5x

Compound	Blank ID	Sample Identification								
	EB2-120513	5X								
G	1.88*	0.00940								
J	0.627*	0.00314								

\* EMPC

EB2-120513 (PH140)

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

All contaminants within five times the blank concentration were qualified as not detected, "U".



# VALIDATION FINDINGS WORKSHEET Field Blanks

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

Blank units: pg/L Associated sample units: ng/kg

Sampling date: 12/05/13

Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 3-4 >5x

Compound	Blank ID	Sample Identification							
	EB3-120513	5X							
B	0.635*	0.00318							
E	0.353*	0.00177							
F	0.436*	0.00218							
G	19.6*	0.09800							
I	0.499*	0.00250							
J	0.244*	0.00122							
K	0.225*	0.00113							
L	0.118*	0.00059							
N	0.390	0.00195							
O	0.380*	0.00190							
P	0.446*	0.00223							
Q	1.02*	0.00510							

\* EMPC

EB3-120513 (PH140)

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:  
All contaminants within five times the blank concentration were qualified as not detected, "U".



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: pg/L Associated sample units: ng/kg

Sampling date: 04/16/13

Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: All >5x

Compound	Blank ID	Sample Identification								
	FB-041613	5X								
B	0.434*	0.00217								
F	0.309*	0.00155								
G	0.838*	0.00419								
I	0.324	0.00162								
J	0.429*	0.00215								
K	0.257	0.00129								
N	0.241*	0.00121								
M	0.284*	0.00142								
O	0.314*	0.00157								
Q	0.357*	0.00179								

\* EMPC

FB-041613 (PH032)

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:  
All contaminants within five times the blank concentration were qualified as not detected, "U".

V:\Field Blanks\31224B21\_FB-041613.wpd



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

Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Compound quantitation and RLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

[illegible]

P:\Dx COMQUA\COMQUA\_CDM.wpd



VALIDATION FINDINGS WORKSHEET  
Field Duplicates

Method: HRGC/HRMS D/Fs (EPA Method 1613B)

Analyte	Concentration (pg/g)		RPD (≤ 50%)	Qualifications Parent Sample Only
	3	4		
A	0.0707	0.0848	18	--
B	0.269	0.688	88	Jdets/A (FD)
C	0.441	0.589	29	--
D	1.04	1.10	6	--
E	0.790	0.926	16	--
F	17.3	13.2	27	--
G	142	106	29	--
H	0.622	0.487	24	--
I	0.878	1.13	25	--
J	0.889	0.995	11	--
K	0.466	0.660	34	--
L	0.470	0.682	37	--
M	0.462	0.727	45	--
N	0.206	0.466	77	Jdets/A (FD)
O	3.75	4.26	13	--
P	0.363	0.597	49	--
Q	8.97	8.17	9	--



# **VALIDATION FINDINGS WORKSHEET** **Initial Calibration Calculation Verification**

**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	Recalculated	Reported	Recalculated	Reported	Recalculated
				Average RRF (initial)	Average RRF (initial)	RRF (CS3 std)	RRF (CS3 std)	%RSD	%RSD
1	ICAL	11-14-13	2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)	0.996	0.996	0.928	0.928	6.11	6.11
	DF19780		2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)	1.163	1.163	1.058	1.058	12.37	12.38
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)	0.924	0.924	0.906	0.906	3.51	3.49
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8,-HpCDD)	1.023	1.023	0.987	0.987	1.93	1.96
			OCDF ( <sup>13</sup> C-OCDF)	0.927	0.927	0.917	0.917	5.16	5.18
2			2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8,-HpCDD)						
			OCDF ( <sup>13</sup> C-OCDF)						
3			2,3,7,8-TCDF ( <sup>13</sup> C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD ( <sup>13</sup> C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD ( <sup>13</sup> C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD ( <sup>13</sup> C-1,2,4,6,7,8,-HpCDD)						
			OCDF ( <sup>13</sup> C-OCDF)						

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



LDC #: 31224B21

# **VALIDATION FINDINGS WORKSHEET** **Routine Calibration Results Verification**

Page: 1 of 1  
 Reviewer: *Qm*  
 2nd Reviewer: *sm*

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

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

$A_x$  = Area of compound,

$C_x$  = Concentration of compound,

$A_{is}$  = Area of associated internal standard

$C_{is}$  = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Spiked Conc (ng/mL)	Reported	Recalculated	Reported	Recalculated
					Conc (ng/mL)	Conc (ng/mL)	%R	%R
1	CS30002	12-16-13	2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10	9.15	9.15	92	92
	DF19780		2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10	10.53	10.53	105	105
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50	49.09	49.07	98	98
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50	48.85	48.83	98	98
			OCDF ( $^{13}\text{C}$ -OCDF)	100	97.87	97.84	98	98
2	CS30003	12-17-13	2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10	9.02	9.025	90	90
	DF19780		2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10	8.63	8.63	86	86
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50	47.54	47.52	95	95
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50	46.89	46.86	94	94
			OCDF ( $^{13}\text{C}$ -OCDF)	100	95.67	95.65	96	96
3			2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10				
			2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10				
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50				
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50				
			OCDF ( $^{13}\text{C}$ -OCDF)	100				

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.



# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

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

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SSR} - \text{SR}) / \text{SA}$$

Where: SSR = Spiked sample result, SR = Sample result  
 SA = Spike added

$$\text{RPD} = | \text{MSR} - \text{MSDR} | * 2 / (\text{MSR} + \text{MSDR})$$

MSR = Matrix spike percent recovery    MSDR = Matrix spike duplicate percent recovery

MS/MSD samples: 8/9

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		Reported RPD	Recalculated RPD
	MS	MSD		MS	MSD	Reported	Recalc	Reported	Recalc	----	----
2,3,7,8-TCDD	21.6	21.3	0.6707	18.8	19.0	87	87	89	89	1	1
1,2,3,7,8-PeCDD	108	106.5	0.269	101	102	93	93	95	95	1	1
1,2,3,4,7,8-HxCDD	108	106.5	0.441	106	107	98	98	100	100	1	1
1,2,3,4,7,8,9-HpCDF	108	106.5	0.363	110	109	101	101	102	102	0	1
OCDF	216	213	8.97	218	213	97	97	96	96	2	2

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



LDC #: 31224B21

# **VALIDATION FINDINGS WORKSHEET** **Laboratory Control Sample Results Verification**

Page: 1 of 1  
 Reviewer: JM  
 2nd Reviewer: SH

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

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory 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 = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS ID: OPR 347003

Compound	Spike Added (ng/kg)		Spiked Sample Concentration (ng/kg)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
2,3,7,8-TCDD	20	NA	18.16	NA	93	93				
1,2,3,7,8-PeCDD	100		94.7		95	95				
1,2,3,4,7,8-HxCDD	100		99.5		100	100				
1,2,3,4,7,8,9-HpCDF	100		103		103	103				
OCDF	200		200		100	100				

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.



## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

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

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

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

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

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

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

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

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

Df = Dilution Factor.

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

**Example:**

Sample I.D. 1, H:

$$\text{Conc.} = \frac{(176 + 196)(2000)(1)}{(380194 + 295080)(0.996)(10.01)(.906)}$$

$$= 0.122 \text{ ng/Kg}$$

[illegible]



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH157**

Prepared for

**CDM Smith**  
555 17th Street, Suite 1100  
Denver, CO 80202

Prepared by

**Laboratory Data Consultants, Inc.**  
2701 Loker Ave West, Suite 220  
Carlsbad, California 92010

February 21, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for one sample collected on December 17, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) 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 (CLPNFGs) for Superfund Organic Methods Data Review (June 2008). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, surrogates, laboratory control sample (LCS), method blanks, equipment blanks and field blanks. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013). Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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



## **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 QC criteria.

## **II. Initial Calibration**

Initial Calibration data were not reviewed for level III.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for level III.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks.

## **V. Surrogate Spikes**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

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

## **VII. Laboratory Duplicates Sample**

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

## **VIII. Laboratory Control Samples (LCS)**

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

## **IX. Internal Standards**

Internal standards were not reviewed for level III.

## **X. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.



All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH157	All compounds reported as detected below the RL.	J (all detects)	A

### **XI. Field Duplicate Samples**

No field duplicates were identified in this SDG.

### **XII. Field Blank Samples**

No trip blanks were identified in this SDG.

One equipment blank (from SDG PH140) was collected and analyzed for SVOCs. The equipment blank had detections for several SVOCs. The sample results were not detected or were significantly greater than the concentrations found in the equipment blank, therefore no data were qualified.

One field blank (from SDG PH032) was collected and analyzed for SVOCs. The field blank had detections for several SVOCs. The sample results were not detected or were significantly greater than the concentrations found in the field blank, therefore no data were qualified.

### **XIII. Overall Assessment of Data**

The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. The remainder of the data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



**Attachment 1**

**Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Dec-2013	SL-551-NBZ-SB-0.0-0.5	7316781	N	3546	8270D SIM	III



**Attachment 2**  
**Overall Data Qualification Summary**



## Data Qualifier Summary

Lab Reporting Batch ID: PH157

Laboratory: LL

EDD Filename: PH157

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-551-NBZ-SB-0.0-0.5

Collected: 12/17/2013 11:25:00 Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.86	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-551-NBZ-SB-0.0-0.5

Collected: 12/17/2013 11:25:00 Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.96	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.88	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.88	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	13	J	6.1	MDL	18	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

2/21/2014 7:56:34 AM

ADR version 1.7.0.207

Page 1 of 2



## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH157

Laboratory: LL

EDD Filename: PH157

eQAPP Name: CDM\_SSFL\_140113\_Lan

### **Reason Code Legend**

<b><i>Reason Code</i></b>	<b><i>Description</i></b>
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

2/21/2014 7:56:34 AM

ADR version 1.7.0.207

Page 2 of 2



**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH157



## Reporting Limit Outliers

Lab Reporting Batch ID: PH157

Laboratory: LL

EDD Filename: PH157

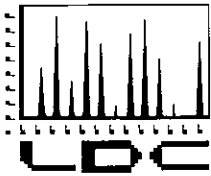
eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-551-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.86	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.96	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.88	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.88	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	13	18	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.7	PQL	ug/Kg	





## LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

CDM  
555 17th Street, Suite 1100  
Denver, CO 80202  
ATTN: Mrs. Cherie Zakowski

March 3, 2014

SUBJECT: Santa Susana Field Laboratory, Subarea NBZ Data Validation

Dear Mrs. Zakowski,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on January 31, 2014. Attachment 1 is a summary of the samples that were reviewed for each analysis.

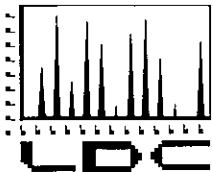
**LDC Project # 31254:**

<b><u>SDG #</u></b>	<b><u>Fraction</u></b>
PH142, PH140	Semivolatiles, Chlorinated Pesticides, Metals, Total Petroleum
PH143, PH146	Hydrocarbons as Gasoline, Total Petroleum Hydrocarbons as
PH148, PH151	Extractables, Nitrate as Nitrogen, Dioxins/Dibenzofurans, PSBs, Herbicides, Wet Chemistry

The data validation was performed under Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Quality Assurance Project Plan for Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit, March 2009, Revision 4
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010
- Polychlorinated Dioxins/Dibenzofurans Data Review, September 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007





Please feel free to contact us if you have any questions.

Sincerely,

Shauna McKellar  
Project Manager/Chemist



90/10 ADR/IV LDC #31254 (CDM Federal Programs-Chantilly VA / Santa Susana Field Laboratory, Subarea NBZ)

Shaded cells indicate Level IV validation (all other cells are ADR review). These sample counts do not include MS/MSD, and DUPs



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH142**

Prepared for

**CDM Smith**  
555 17th Street, Suite 1100  
Denver, CO 80202

Prepared by

**Laboratory Data Consultants, Inc.**  
2701 Loker Ave West, Suite 220  
Carlsbad, California 92010

February 26, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level IV data validation results for samples collected on December 9, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) 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 (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)  
Pesticides by EPA SW 846 Method 8081B  
Metals by EPA SW 846 Method 6010C, 6020A and 7471B  
Total Petroleum Hydrocarbons (TPH) as Gasoline by EPA SW 846 Method 8015M  
TPH as Extractables by EPA SW 846 Method 8015M  
Dioxins and Dibenzofurans by EPA Method 1613B

Wet Chemistry:

Nitrate as Nitrogen by EPA Method 300.0

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I. Level IV DVRs are presented in Enclosure II.

All sample results were subjected to Level IV data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards, interference check (ICSA and ICSAB) samples, matrix spike/matrix spike duplicates (MS/MSD), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), ICP serial dilutions, method blanks, trip blanks, equipment blanks, field blanks, field duplicate samples, and the raw data to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the initial and continuing calibrations, ICB/CCBs, interference check samples, internal standards (except dioxins), and ICP serial dilutions, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

All criteria for the initial calibration of each method were met.

## **III. Continuing Calibration**

All criteria for the initial calibration verifications and continuing calibration of each method were met with the exception of Endosulfan II. The associated sample results were qualified as non-detected estimated (UJ). The details regarding the qualification of data are provided in Enclosure II.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of two blanks for metals and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosures I and II.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the exception of several metals. The associated sample results were not detected or were significantly greater than the concentrations found in the associated blanks, therefore no data were qualified. The details are presented in Enclosure II.

## **V. Surrogate Spikes**

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

## **VI. ICP Interference Check Sample (ICS) Analysis**

The frequency of analysis was met.

The criteria for analysis were met.

## **VII. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed at the required frequency. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one MS/MSD pair for SVOCs, TPH as extractables, nitrate as nitrogen and one MS/MSD pair for metals from SDG PH139. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The details regarding the qualification of data are provided in Enclosures I and II.



## **VIII. Laboratory Duplicates Sample**

Laboratory duplicates (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## **IX. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## **X. Internal Standards**

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

## **XI. ICP Serial Dilution**

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

## **XII. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the exception of two samples for pesticides. The associated sample results were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosure II.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag
All samples in SDG PH142	All compounds reported as detected below the RL.	J (all detects)

## **XIII. Field Duplicate Samples**

One field duplicate pair was collected and analyzed for SVOCs, TPH as extractables and nitrate as nitrogen. All RPDs were within QC limits with the exception of SVOCs, TPH as extractables and nitrate as nitrogen. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The field duplicate result comparisons are provided in Enclosures I and II.

## **XIV. Field Blank Samples**

One trip blank was collected and analyzed for TPH as gasoline. No volatile contaminants were found in the trip blank.

Two equipment blanks (from SDG PH146) were collected and analyzed for SVOCs, pesticides, metals, TPH as gasoline, TPH as extractables, nitrate as nitrogen and dioxins. The equipment blanks had detections for SVOCs, metals and dioxins. The associated sample results were not



detected or were significantly greater than the concentrations found in the equipment blanks, therefore no data were qualified. The details are provided in Enclosure II.

One field blank (from SDG PH032) was collected and analyzed for SVOCs, pesticides, metals, TPH as gasoline, TPH as extractables, dioxins and nitrate as nitrogen. The field blank had detections for SVOCs, metals and dioxins. The associated sample results were not detected or were significantly greater than the concentrations found in the field blank, therefore no data were qualified. The details are provided in Enclosure II.

## **XV. Overall Assessment of Data**

No data associated with this sampling event were rejected. The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. All data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



## **Attachment 1**

### **Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Dec-2013	TB-120913	7307341	TB	5030B	8015M	IV
09-Dec-2013	SL-513-NBZ-SB-0.0-0.5	7307346	N	3546	8015M	IV
09-Dec-2013	SL-516-NBZ-SB-0.0-0.5	7307344	N	3050B	6010C	IV
09-Dec-2013	SL-516-NBZ-SB-0.0-0.5	7307344	N	3050B	6020A	IV
09-Dec-2013	SL-516-NBZ-SB-0.0-0.5	7307344	N	3546	8015M	IV
09-Dec-2013	SL-516-NBZ-SB-0.0-0.5	7307344	N	3546	8270D SIM	IV
09-Dec-2013	SL-516-NBZ-SB-0.0-0.5	7307344	N	METHOD	1613B	IV
09-Dec-2013	SL-516-NBZ-SB-0.0-0.5	7307344	N	METHOD	7471B	IV
09-Dec-2013	SL-516-NBZ-SB-4.0-5.0	7307345	N	3050B	6010C	IV
09-Dec-2013	SL-516-NBZ-SB-4.0-5.0	7307345	N	3050B	6020A	IV
09-Dec-2013	SL-516-NBZ-SB-4.0-5.0	7307345	N	3546	8015M	IV
09-Dec-2013	SL-516-NBZ-SB-4.0-5.0	7307345	N	3546	8270D SIM	IV
09-Dec-2013	SL-516-NBZ-SB-4.0-5.0	7307345	N	5035A	8015M	IV
09-Dec-2013	SL-516-NBZ-SB-4.0-5.0	7307345	N	METHOD	1613B	IV
09-Dec-2013	SL-516-NBZ-SB-4.0-5.0	7307345	N	METHOD	7471B	IV
09-Dec-2013	SL-522-NBZ-SB-0.0-0.5	7307347	N	3546	8015M	IV
09-Dec-2013	SL-522-NBZ-SB-0.0-0.5	7307347	N	3546	8270D SIM	IV
09-Dec-2013	SL-522-NBZ-SB-0.0-0.5	7307347	N	METHOD	300.0	IV
09-Dec-2013	SL-522-NBZ-SB-2.5-3.5	7307354	N	3546	8015M	IV
09-Dec-2013	SL-522-NBZ-SB-2.5-3.5	7307354	N	3546	8270D SIM	IV
09-Dec-2013	SL-522-NBZ-SB-2.5-3.5	7307354	N	5035A	8015M	IV
09-Dec-2013	SL-522-NBZ-SB-2.5-3.5	7307354	N	METHOD	300.0	IV
09-Dec-2013	SL-514-NBZ-SB-0.0-0.5	7307342	N	3546	8081B	IV
09-Dec-2013	SL-523-NBZ-SB-0.0-0.5	7307348	N	3546	8015M	IV
09-Dec-2013	SL-523-NBZ-SB-0.0-0.5	7307348	N	3546	8270D SIM	IV
09-Dec-2013	SL-523-NBZ-SB-0.0-0.5	7307348	N	METHOD	300.0	IV



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Dec-2013	SL-515-NBZ-SB-0.0-0.5	7307343	N	3546	8081B	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5	7307349	N	3546	8015M	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5	7307349	N	3546	8270D SIM	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5	7307349	N	METHOD	300.0	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5MS	7307350	MS	3546	8015M	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5MS	7307350	MS	3546	8270D SIM	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5MS	7307350	MS	METHOD	300.0	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5MSD	7307351	MSD	3546	8015M	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5MSD	7307351	MSD	3546	8270D SIM	IV
09-Dec-2013	SL-524-NBZ-SB-0.0-0.5DUP	7307352	DUP	METHOD	300.0	IV
09-Dec-2013	SL-824-NBZ-SB-0.0-0.5	7307353	FD	3546	8015M	IV
09-Dec-2013	SL-824-NBZ-SB-0.0-0.5	7307353	FD	3546	8270D SIM	IV
09-Dec-2013	SL-824-NBZ-SB-0.0-0.5	7307353	FD	METHOD	300.0	IV



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** GENCHEM

**Method:** 300.0

**Matrix:** SO

Sample ID: SL-522-NBZ-SB-0.0-0.5

Collected: 12/9/2013 11:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	3.2		0.42	MDL	0.78	PQL	mg/Kg	J	Q

Sample ID: SL-522-NBZ-SB-2.5-3.5

Collected: 12/9/2013 11:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	0.61	J	0.42	MDL	0.79	PQL	mg/Kg	J	Z, Q

Sample ID: SL-523-NBZ-SB-0.0-0.5

Collected: 12/9/2013 12:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	8.6		0.42	MDL	0.78	PQL	mg/Kg	J	Q

Sample ID: SL-524-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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
Nitrate-NO3	0.70	J	0.42	MDL	0.78	PQL	mg/Kg	J	Z, Q, FD

Sample ID: SL-824-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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
Nitrate-NO3	5.8		0.42	MDL	0.79	PQL	mg/Kg	J	Q, FD

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-516-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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
ANTIMONY	4.15	U	0.768	MDL	4.15	PQL	mg/Kg	UJ	Q
BERYLLIUM	0.658	J	0.0695	MDL	1.04	PQL	mg/Kg	J	Z
BORON	2.00	J	0.871	MDL	10.4	PQL	mg/Kg	J	Z
CADMIUM	0.430	J	0.0788	MDL	1.04	PQL	mg/Kg	J	Z
SODIUM	71.7	J	17.3	MDL	104	PQL	mg/Kg	J	Z
TIN	3.17	J	0.228	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.35	J	0.871	MDL	5.19	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-516-NBZ-SB-4.0-5.0

Collected: 12/9/2013 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
ANTIMONY	4.13	U	0.764	MDL	4.13	PQL	mg/Kg	UJ	Q
ARSENIC	2.81	J	0.722	MDL	4.13	PQL	mg/Kg	J	Z
BERYLLIUM	0.577	J	0.0691	MDL	1.03	PQL	mg/Kg	J	Z
BORON	1.24	J	0.867	MDL	10.3	PQL	mg/Kg	J	Z
CADMIUM	0.303	J	0.0784	MDL	1.03	PQL	mg/Kg	J	Z
COPPER	1.31	J	0.299	MDL	2.06	PQL	mg/Kg	J	Z
SODIUM	58.9	J	17.2	MDL	103	PQL	mg/Kg	J	Z
TIN	2.93	J	0.227	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	3.65	J	0.867	MDL	5.16	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-516-NBZ-SB-0.0-0.5

Collected: 12/9/2013 10:30:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.184	J	0.104	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: SL-516-NBZ-SB-0.0-0.5

Collected: 12/9/2013 10:30:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0598	J	0.0270	MDL	0.207	PQL	mg/Kg	J	Z
STRONTIUM	18.9		0.0705	MDL	0.415	PQL	mg/Kg	J	Q

Sample ID: SL-516-NBZ-SB-4.0-5.0

Collected: 12/9/2013 11:00:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	10.7		0.0702	MDL	0.413	PQL	mg/Kg	J	Q

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

Sample ID: SL-516-NBZ-SB-0.0-0.5

Collected: 12/9/2013 10:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0162	J	0.0105	MDL	0.0176	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-516-NBZ-SB-0.0-0.5

Collected: 12/9/2013 10:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.52	JB	0.0422	MDL	5.15	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.411	JB	0.0239	MDL	5.15	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0540	JBQ	0.0295	MDL	5.15	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.156	JBQ	0.0353	MDL	5.15	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.144	J	0.0420	MDL	5.15	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.101	JB	0.0339	MDL	5.15	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.140	JQ	0.0394	MDL	5.15	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.129	JB	0.0402	MDL	5.15	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.231	JBQ	0.0381	MDL	5.15	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.153	J	0.0355	MDL	5.15	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.300	JQ	0.0343	MDL	5.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.115	JQ	0.0896	MDL	1.03	PQL	ng/Kg	J	Z
OCDF	0.775	JB	0.0434	MDL	10.3	PQL	ng/Kg	J	Z

Sample ID: SL-516-NBZ-SB-4.0-5.0

Collected: 12/9/2013 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	0.0566	JBQ	0.0271	MDL	5.10	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0309	JBQ	0.0118	MDL	5.10	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0275	JBQ	0.0137	MDL	5.10	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0296	JBQ	0.0194	MDL	5.10	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0337	JQ	0.0229	MDL	5.10	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0225	JBQ	0.0205	MDL	5.10	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0392	JBQ	0.0390	MDL	5.10	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0646	JBQ	0.0292	MDL	5.10	PQL	ng/Kg	U	B
OCDD	0.285	JB	0.0217	MDL	10.2	PQL	ng/Kg	U	B

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-516-NBZ-SB-4.0-5.0

Collected: 12/9/2013 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
OCDF	0.118	JBQ	0.0303	MDL	10.2	PQL	mg/Kg	U	B

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-522-NBZ-SB-0.0-0.5

Collected: 12/9/2013 11:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.7	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z

Sample ID: SL-523-NBZ-SB-0.0-0.5

Collected: 12/9/2013 12:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.3	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z

Sample ID: SL-524-NBZ-SB-0.0-0.5

Collected: 12/9/2013 1:40:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	8.4	J	4.2	MDL	10	PQL	mg/Kg	J	Z, Q, Q, FD
EFH (C21-C30)	58		4.2	MDL	10	PQL	mg/Kg	J	FD
EFH (C30-C40)	120		8.4	MDL	21	PQL	mg/Kg	J	FD

Sample ID: SL-824-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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 (C15-C20)	2.2	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z, FD
EFH (C21-C30)	28		2.1	MDL	5.2	PQL	mg/Kg	J	FD
EFH (C30-C40)	50		4.2	MDL	10	PQL	mg/Kg	J	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-514-NBZ-SB-0.0-0.5

Collected: 12/9/2013 12:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.85	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
4,4'-DDT	0.61	J	0.38	MDL	1.8	PQL	ug/Kg	J	Z, *XIII
ENDOSULFAN I	0.42	J	0.24	MDL	0.90	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.50	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-515-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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
4,4'-DDE	1.0	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z, *XIII
4,4'-DDT	1.2	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
ENDOSULFAN II	1.9	U	0.36	MDL	1.9	PQL	ug/Kg	UJ	C

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-516-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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-METHYLNAPHTHALENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-516-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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
2-METHYLNAPHTHALENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.82	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-516-NBZ-SB-4.0-5.0

Collected: 12/9/2013 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
NAPHTHALENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-522-NBZ-SB-0.0-0.5

Collected: 12/9/2013 11:05:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.93	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.77	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.78	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-523-NBZ-SB-0.0-0.5

Collected: 12/9/2013 12:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-523-NBZ-SB-0.0-0.5

Collected: 12/9/2013 12:45:00

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	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.0	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.87	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.6	J	6.3	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.79	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-524-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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-METHYLNAPHTHALENE	1.7	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD

Sample ID: SL-524-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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
2-METHYLNAPHTHALENE	0.87	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
ANTHRACENE	1.7	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	1.7	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	1.7	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method Category: SVOA

Method: 8270D SIM

Matrix: SO

Sample ID: SL-524-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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
BENZO(B)FLUORANTHENE	2.0		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.7	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	1.7	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.2	MDL	19	PQL	ug/Kg	UJ	FD
Butylbenzylphthalate	19	U	6.2	MDL	19	PQL	ug/Kg	UJ	FD
CHRYSENE	2.4		0.35	MDL	1.7	PQL	ug/Kg	J	FD
FLUORANTHENE	1.3	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
FLUORENE	1.7	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	1.7	U	0.69	MDL	1.7	PQL	ug/Kg	UJ	FD
PYRENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD

Sample ID: SL-824-NBZ-SB-0.0-0.5

Collected: 12/9/2013 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-METHYLNAPHTHALENE	1.2	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-824-NBZ-SB-0.0-0.5

Collected: 12/9/2013 2:30:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.4	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.37	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	1.7	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	2.2		0.70	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	5.7		0.70	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.6	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	1.7	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	31		6.3	MDL	19	PQL	ug/Kg	J	FD
Butylbenzylphthalate	12	J	6.3	MDL	19	PQL	ug/Kg	J	Z, FD
CHRYSENE	5.4		0.35	MDL	1.8	PQL	ug/Kg	J	FD
FLUORANTHENE	4.1		0.70	MDL	1.8	PQL	ug/Kg	J	FD
FLUORENE	0.97	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	1.1	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD
PYRENE	4.7		0.70	MDL	1.8	PQL	ug/Kg	J	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
*XIII	RPD Between Two Columns
A	Professional Judgment
B	Method Blank Contamination
C	Continuing Calibration Verification Percent Difference Lower Estimation
E	Matrix Spike Precision
FD	Field Duplicate Precision
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: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH142



# Method Blank Outlier Report

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3480B370830	12/17/2013 8:30:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF OCDD OCDF	0.0876 ng/Kg 0.0437 ng/Kg 0.0211 ng/Kg 0.0259 ng/Kg 0.0161 ng/Kg 0.0232 ng/Kg 0.0688 ng/Kg 0.0326 ng/Kg 0.0310 ng/Kg 0.213 ng/Kg 0.125 ng/Kg	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-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-516-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0540 ng/Kg	0.0540U ng/Kg
SL-516-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.101 ng/Kg	0.101U ng/Kg
SL-516-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.129 ng/Kg	0.129U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.0566 ng/Kg	0.0566U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0309 ng/Kg	0.0309U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0275 ng/Kg	0.0275U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDF	0.0296 ng/Kg	0.0296U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	1,2,3,7,8,9-HxCDF	0.0225 ng/Kg	0.0225U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0392 ng/Kg	0.0392U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0646 ng/Kg	0.0646U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	OCDD	0.285 ng/Kg	0.285U ng/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	OCDF	0.118 ng/Kg	0.118U ng/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34737AB221738	12/16/2013 5:38:00 PM	CALCIUM MAGNESIUM TIN ZINC	4.84 mg/Kg 2.30 mg/Kg 1.63 mg/Kg 0.233 mg/Kg	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-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-516-NBZ-SB-0.0-0.5(RES)	TIN	3.17 mg/Kg	3.17U mg/Kg
SL-516-NBZ-SB-4.0-5.0(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg

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# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-524-NBZ-SB-0.0-0.5MS SL-524-NBZ-SB-0.0-0.5MSD (SL-524-NBZ-SB-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	-40 -178	-175 -294	49.00-123.00 49.00-123.00	40 (20.00) 23 (20.00)	EFH (C21-C30) EFH (C30-C40)	No Qual, >4x
SL-524-NBZ-SB-0.0-0.5MSD (SL-524-NBZ-SB-0.0-0.5)	EFH (C15-C20)	-	15	49.00-123.00	40 (20.00)	EFH (C15-C20)	J(all detects) UJ(all non-detects)

Method: 8270D SIM

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-524-NBZ-SB-0.0-0.5MSD (SL-524-NBZ-SB-0.0-0.5)	Di-n-octylphthalate	-	171	52.00-162.00	-	Di-n-octylphthalate	J(all detects)

Method: 300.0

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-524-NBZ-SB-0.0-0.5MS (SL-522-NBZ-SB-0.0-0.5 SL-522-NBZ-SB-2.5-3.5 SL-523-NBZ-SB-0.0-0.5 SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5)	Nitrate-NO3	129	-	80.00-120.00	-	Nitrate-NO3	J(all detects)



# Field Duplicate RPD Report

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PrepPH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 160.3M

Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
MOISTURE	4.6	5.4	16		No Qualifiers Applied

Method: 300.0

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
Nitrate-NO3	0.70	5.8	157	50.00	J(all detects)

Method: 8015M

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
EFH (C15-C20)	8.4	2.2	117	50.00	J(all detects)
EFH (C21-C30)	58	28	70	50.00	
EFH (C30-C40)	120	50	82	50.00	

Method: 8270D SIM

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
2-METHYLNAPHTHALENE	0.87	1.4	47	50.00	No Qualifiers Applied
NAPHTHALENE	1.7	2.3	30	50.00	
PHENANTHRENE	2.1	3.3	44	50.00	
1-METHYLNAPHTHALENE	1.7 U	1.2	200	50.00	J(all detects) UJ(all non-detects)
ANTHRACENE	1.7 U	0.37	200	50.00	
BENZO(A)ANTHRACENE	1.7 U	1.7	200	50.00	
BENZO(A)PYRENE	1.7 U	2.2	200	50.00	
BENZO(B)FLUORANTHENE	2.0	5.7	96	50.00	
BENZO(G,H,I)PERYLENE	1.7 U	1.6	200	50.00	
BENZO(K)FLUORANTHENE	1.7 U	1.7	200	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	19 U	31	200	50.00	
Butylbenzylphthalate	19 U	12	200	50.00	
CHRYSENE	2.4	5.4	77	50.00	
FLUORANTHENE	1.3	4.1	104	50.00	
FLUORENE	1.7 U	0.97	200	50.00	
INDENO(1,2,3-CD)PYRENE	1.7 U	1.1	200	50.00	
PYRENE	1.4	4.7	108	50.00	

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Reporting Limit Outliers

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 1613B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-516-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.52	5.15	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.411	5.15	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0540	5.15	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.156	5.15	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.144	5.15	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.101	5.15	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.140	5.15	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.129	5.15	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.231	5.15	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	J	0.153	5.15	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JQ	0.300	5.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.115	1.03	PQL	ng/Kg	
	OCDF	JB	0.775	10.3	PQL	ng/Kg	
SL-516-NBZ-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.0566	5.10	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0309	5.10	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0275	5.10	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0296	5.10	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.0337	5.10	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0225	5.10	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0392	5.10	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0646	5.10	PQL	ng/Kg	
	OCDD	JB	0.285	10.2	PQL	ng/Kg	
	OCDF	JBQ	0.118	10.2	PQL	ng/Kg	

**Method:** 300.0

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-522-NBZ-SB-2.5-3.5	Nitrate-NO3	J	0.61	0.79	PQL	mg/Kg	J (all detects)
SL-524-NBZ-SB-0.0-0.5	Nitrate-NO3	J	0.70	0.78	PQL	mg/Kg	J (all detects)

**Method:** 6010C

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-516-NBZ-SB-0.0-0.5	BERYLLIUM	J	0.658	1.04	PQL	mg/Kg	J (all detects)
	BORON	J	2.00	10.4	PQL	mg/Kg	
	CADMIUM	J	0.430	1.04	PQL	mg/Kg	
	SODIUM	J	71.7	104	PQL	mg/Kg	
	TIN	J	3.17	10.4	PQL	mg/Kg	
	Zirconium	J	2.35	5.19	PQL	mg/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-516-NBZ-SB-4.0-5.0	ARSENIC	J	2.81	4.13	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.577	1.03	PQL	mg/Kg	
	BORON	J	1.24	10.3	PQL	mg/Kg	
	CADMIUM	J	0.303	1.03	PQL	mg/Kg	
	COPPER	J	1.31	2.06	PQL	mg/Kg	
	SODIUM	J	58.9	103	PQL	mg/Kg	
	TIN	J	2.93	10.3	PQL	mg/Kg	
	Zirconium	J	3.65	5.16	PQL	mg/Kg	

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-516-NBZ-SB-0.0-0.5	SELENIUM	J	0.184	0.415	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0598	0.207	PQL	mg/Kg	

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-516-NBZ-SB-0.0-0.5	MERCURY	J	0.0162	0.0176	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-522-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.7	5.2	PQL	mg/Kg	J (all detects)
SL-523-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	3.3	5.2	PQL	mg/Kg	J (all detects)
SL-524-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	8.4	10	PQL	mg/Kg	J (all detects)
SL-824-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.2	5.2	PQL	mg/Kg	J (all detects)

Method: 8081B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-514-NBZ-SB-0.0-0.5	4,4'-DDE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.61	1.8	PQL	ug/Kg	
	ENDOSULFAN I	J	0.42	0.90	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.50	1.8	PQL	ug/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH142

Laboratory: LL

EDD Filename: PH142

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8081B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-515-NBZ-SB-0.0-0.5	4,4'-DDE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	1.2	1.9	PQL	ug/Kg	

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-516-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.82	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.7	1.8	PQL	ug/Kg	
SL-516-NBZ-SB-4.0-5.0	NAPHTHALENE	J	1.4	1.7	PQL	ug/Kg	J (all detects)
SL-522-NBZ-SB-0.0-0.5	BENZO(G,H,I)PERYLENE	J	0.93	1.7	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.77	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.78	1.7	PQL	ug/Kg	
	PYRENE	J	1.1	1.7	PQL	ug/Kg	
SL-523-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.6	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.87	1.7	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.6	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.79	1.7	PQL	ug/Kg	
SL-524-NBZ-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.87	1.7	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	PYRENE	J	1.4	1.7	PQL	ug/Kg	
SL-824-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.37	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	12	19	PQL	ug/Kg	
	FLUORENE	J	0.97	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	



**Enclosure II**

**EPA Level IV Data Validation Reports**



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 9, 2013  
**LDC Report Date:** February 19, 2014  
**Matrix:** Soil  
**Parameters:** Semivolatiles  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH142

**Sample Identification**

SL-516-NBZ-SB-0.0-0.5  
SL-516-NBZ-SB-4.0-5.0  
SL-522-NBZ-SB-0.0-0.5  
SL-523-NBZ-SB-0.0-0.5  
SL-524-NBZ-SB-0.0-0.5  
SL-824-NBZ-SB-0.0-0.5  
SL-522-NBZ-SB-2.5-3.5  
SL-524-NBZ-SB-0.0-0.5MS  
SL-524-NBZ-SB-0.0-0.5MSD



## Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270D using Selected Ion Monitoring (SIM) for Semivolatiles.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. GC/MS Instrument Performance Check**

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

## **III. Initial Calibration**

Initial calibration was performed using required standard.

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

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

## **IV. Continuing Calibration**

Continuing calibration was performed at the required frequencies.

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

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

## **V. Blanks**

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method.

Samples EB1-121113, and EB2-121113 (both from SDG PH146) were identified as equipment blanks. No semivolatile contaminants were found with the following exceptions:



Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB1-121113	12/11/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate	0.13 ug/L 0.15 ug/L 2.2 ug/L	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-SB-4.0-5.0
EB2-121113	12/11/13	Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate Fluoranthene Pyrene	0.13 ug/L 0.16 ug/L 0.42 ug/L 0.012 ug/L 0.049 ug/L	SL-522-NBZ-SB-0.0-0.5 SL-523-NBZ-SB-0.0-0.5 SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5 SL-522-NBZ-SB-2.5-3.5

Sample FB-041613 (from SDG PH032) was identified as a field blank. No semivolatile contaminants were found with the following exceptions:

Blank ID	Sampling Date	Compound	Concentration	Associated Samples
FB-041613	4/16/13	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate 2-Methylnaphthalene	0.11 ug/L 0.25 ug/L 0.012 ug/L	All samples in SDG PH142

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

## VI. Surrogate Spikes

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

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-524-NBZ-SB-0.0-0.5MS/MSD (SL-524-NBZ-SB-0.0-0.5)	Di-n-octylphthalate	-	171 (52-162)	-	J (all detects)	A

## VIII. Laboratory Control Samples (LCS)

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



## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

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

## XI. Target Compound Identifications

All target compound identifications were within validation criteria.

## XII. Compound Quantitation

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 PH142	All compounds reported below the RL.	J (all detects)	A

## XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

## XIV. System Performance

The system performance was acceptable.

## XV. Overall Assessment of Data

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

## XVI. Field Duplicates

Samples SL-524-NBZ-SB-0.0-0.5 and SL-824-NBZ-SB-0.0-0.5 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
Anthracene	1.7U	0.37	200 (≤50)	J (all detects) UJ (all non-detects)	A



Compound	Concentration (ug/Kg)		RPD (Limits)	Flag	A or P
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
Benzo(a)anthracene	1.7U	1.7	200 (≤50)	J (all detects) UJ (all non-detects)	A
Benzo(a)pyrene	1.7U	2.2	200 (≤50)	J (all detects) UJ (all non-detects)	A
Benzo(b)fluoranthene	2.0	5.7	96 (≤50)	J (all detects)	A
Benzo(g,h,i)perylene	1.7U	1.6	200 (≤50)	J (all detects) UJ (all non-detects)	A
Benzo(k)fluoranthene	1.7U	1.7	200 (≤50)	J (all detects) UJ (all non-detects)	A
Butylbenzylphthalate	19U	12	200 (≤50)	J (all detects) UJ (all non-detects)	A
Chrysene	2.4	5.4	77 (≤50)	J (all detects)	A
Bis(2-ethylhexyl)phthalate	19U	31	200 (≤50)	J (all detects) UJ (all non-detects)	A
Fluoranthene	1.3	4.1	104 (≤50)	J (all detects)	A
Fluorene	1.7U	0.97	200 (≤50)	J (all detects) UJ (all non-detects)	A
Indeno(1,2,3-cd)pyrene	1.7U	1.1	200 (≤50)	J (all detects) UJ (all non-detects)	A
1-Methylnaphthalene	1.7U	1.2	200 (≤50)	J (all detects) UJ (all non-detects)	A
2-Methylnaphthalene	0.87	1.4	47 (≤50)	-	-
Naphthalene	1.7	2.3	30 (≤50)	-	-
Phenanthrene	2.1	3.3	44 (≤50)	-	-
Pyrene	1.4	4.7	108 (≤50)	J (all detects)	A



**Santa Susana Field Laboratory**  
**Semivolatiles - Data Qualification Summary - SDG PH142**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH142	SL-524-NBZ-SB-0.0-0.5	Di-n-octylphthalate	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH142	SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5	Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Butylbenzylphthalate Bis(2-ethylhexyl)phthalate Fluorene Indeno(1,2,3-cd)pyrene 1-Methylnaphthalene	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)
PH142	SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5	Pyrene Chrysene Fluoranthene Benzo(b)fluoranthene	J (all detects) J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)
PH142	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-SB-4.0-5.0 SL-522-NBZ-SB-0.0-0.5 SL-523-NBZ-SB-0.0-0.5 SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5 SL-522-NBZ-SB-2.5-3.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Semivolatiles - Laboratory Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Semivolatiles - Field Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG



LDC #: 31254A2b **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH142

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 2/13/14

Page: 1 of 1

Reviewer: KR

2nd Reviewer: SM

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: 12/9/13
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	RSD ≤ 30%
IV.	Continuing calibration/ICV	A	1 CV / CV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCST <sup>SM</sup>
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	FD = 5 + 6
XVII.	Field blanks	SW	FB = FB-041613 (SD6#PH032)

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-516-NBZ-SB-0.0-0.5	11	21	31	5 BLK 348
2	SL-516-NBZ-SB-4.0-5.0	12	22	32	
3	SL-522-NBZ-SB-0.0-0.5	13	23	33	
4	SL-523-NBZ-SB-0.0-0.5	14	24	34	
5	SL-524-NBZ-SB-0.0-0.5	15	25	35	
6	SL-824-NBZ-SB-0.0-0.5	16	26	36	
7	SL-522-NBZ-SB-2.5-3.5	17	27	37	
8	SL-524-NBZ-SB-0.0-0.5MS	18	28	38	
9	SL-524-NBZ-SB-0.0-0.5MSD	19	29	39	
10		20	30	40	



## Method: Semivolatiles (EPA SW 846 Method 8270D)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. GC/MS Instrument performance check</b>				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples analyzed within the 12 hour clock criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria of $\geq 0.990$ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were all percent relative standard deviations (%RSD) $\leq 30\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq 25\%$ and relative response factors (RRF) $\geq 0.05$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



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



# VALIDATION FINDINGS WORKSHEET

**METHOD: GC/MS SVOA**

A. Phenol	T. 4-Chloroaniline	MM. 4-Chlorophenyl-phenyl ether	FFF. Di-n-octylphthalate	YYY. 2,3,5-Trimethylnaphthalene
B. Bis (2-chloroethyl) ether	U. Hexachlorobutadiene	NN. Fluorene	GGG. Benzo(b)fluoranthene	ZZZ. Perylene
C. 2-Chlorophenol	V. 4-Chloro-3-methylphenol	OO. 4-Nitroaniline	HHH. Benzo(k)fluoranthene	AAAA. Dibenzothiophene
D. 1,3-Dichlorobenzene	W. 2-Methylnaphthalene	PP. 4,6-Dinitro-2-methylphenol	III. Benzo(a)pyrene	BBBB. Benzo(a)fluoranthene
E. 1,4-Dichlorobenzene	X. Hexachlorocyclopentadiene	QQ. N-Nitrosodiphenylamine	JJJ. Indeno(1,2,3-cd)pyrene	CCCC. Benzo(b)fluorene
F. 1,2-Dichlorobenzene	Y. 2,4,6-Trichlorophenol	RR. 4-Bromophenyl-phenylether	KKK. Dibenzo(a,h)anthracene	DDDD. cis/trans-Decalin
G. 2-Methylphenol	Z. 2,4,5-Trichlorophenol	SS. Hexachlorobenzene	LLL. Benzo(g,h,i)perylene	EEEE. Biphenyl
H. 2,2'-Oxybis(1-chloropropane)	AA. 2-Chloronaphthalene	TT. Pentachlorophenol	MMM. Bis(2-Chloroisopropyl)ether	FFFF. Retene
I. 4-Methylphenol	BB. 2-Nitroaniline	UU. Phenanthrene	NNN. Aniline	GGGG. C30-Hopane
J. N-Nitroso-di-n-propylamine	CC. Dimethylphthalate	VV. Anthracene	OOO. N-Nitrosodimethylamine	HHHH. 1-Methylphenanthrene
K. Hexachloroethane	DD. Acenaphthylene	WW. Carbazole	PPP. Benzoic Acid	IIII. 1,4-Dioxane
L. Nitrobenzene	EE. 2,6-Dinitrotoluene	XX. Di-n-butylphthalate	QQQ. Benzyl alcohol	JJJJ. Acetophenone
M. Isophorone	FF. 3-Nitroaniline	YY. Fluoranthene	RRR. Pyridine	KKKK. Atrazine
N. 2-Nitrophenol	GG. Acenaphthene	ZZ. Pyrene	SSS. Benzidine	LLLL. Benzaldehyde
O. 2,4-Dimethylphenol	HH. 2,4-Dinitrophenol	AAA. Butylbenzylphthalate	TTT. 1-Methylnaphthalene	MMMM. Caprolactam
P. Bis(2-chloroethoxy)methane	II. 4-Nitrophenol	BBB. 3,3'-Dichlorobenzidine	UUU. Benzo(b)thiophene	NNNN.
Q. 2,4-Dichlorophenol	JJ. Dibenzofuran	CCC. Benzo(a)anthracene	VVV. Benzonaphthothiophene	OOOO.
R. 1,2,4-Trichlorobenzene	KK. 2,4-Dinitrotoluene	DDD. Chrysene	WWW. Benzo(e)pyrene	PPPP.
S. Naphthalene	LL. Diethylphthalate	EEE. Bis(2-ethylhexyl)phthalate	XXX. 2,6-Dimethylnaphthalene	QQQQ.



LDC #: 31254A26

## VALIDATION FINDINGS WORKSHEET

## Field Blanks

Page: 1 of 2

Reviewer: BK

2nd Reviewer: M

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

Y/N N/A Were field blanks identified in this SDG?

Y/N N/A Were target compounds detected in the field blanks?

Blank units:  $\mu\text{g/L}$  Associated sample units:  $\mu\text{g/kg}$ 

Sampling date: 4/16/13

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All (ND + 75x)

$$PB = FB - 0.41613$$

(SDG # PH032)

Code: F

Compound	Blank ID	Sample Identification							
	FB	5X/10X							
XX	0.11	1.1							
EEE	0.25 7.0	10 2.5							
W	0.012	0.06							

Blank units:  $\mu\text{g/L}$  Associated sample units:  $\mu\text{g/kg}$ 

Sampling date: 12/11/13

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 1-2 (ND)

$$EB1 = EB1 - 12/11/13 \text{ (SDG \# PH146)}$$

Code: F

Compound	Blank ID	Sample Identification							
	EB1	10X							
XX	0.13	1.3							
LL	0.15	1.5							
EEE	2.2	22							

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

Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".



LDC #: 31254A2

## VALIDATION FINDINGS WORKSHEET

## Field Blanks

Page: 2 of 2Reviewer: BK2nd Reviewer: Sn

METHOD: GC/MS BNA (EPA SW 846 Method 8270D)

☒ N N/A Were field blanks identified in this SDG?☒ N N/A Were target compounds detected in the field blanks?Blank units: ug/L Associated sample units: ug/kgSampling date: 12/11/13Field blank type: (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ Associated Samples: 3-7 (ND + 25x)

Compound	Blank ID	Sample Identification							
	EB2	10x							
XX	0.13	1.3							
LL	0.16	1.6							
EE	0.42	4.2							
YY	0.012	0.06							
ZZ	0.049	0.245							

Blank units: \_\_\_\_\_ Associated sample units: \_\_\_\_\_

Sampling date: \_\_\_\_\_

Field blank type: (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ Associated Samples: \_\_\_\_\_

Compound	Blank ID	Sample Identification							

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

Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".



**METHOD:** GC/MS BNA (EPA SW 846 Method 8270D)

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

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

[illegible]



VALIDATION FINDINGS WORKSHEET  
Field Duplicates

Method: GC/MS SVOCs (EPA Method 8270D-SIM)

Analyte	Concentration (µg/kg)		RPD (≤50%)	Qualifiers (Parents Only) Code: FD
	5	6		
VV	1.7U	0.37	200	J/UJ/A
CCC	1.7U	1.7	200	J/UJ/A
III	1.7U	2.2	200	J/UJ/A
GGG	2.0	5.7	96	J DET/A
LLL	1.7U	1.6	200	J/UJ/A
HHH	1.7U	1.7	200	J/UJ/A
AAA	19U	12	200	J/UJ/A
DDD	2.4	5.4	77	J DET/A
EEE	19U	31	200	J/UJ/A
YY	1.3	4.1	104	J DET/A
NN	1.7U	0.97	200	J/UJ/A
JJJ	1.7U	1.1	200	J/UJ/A
TTT	1.7U	1.2	200	J/UJ/A
W	0.87	1.4	47	
S	1.7	2.3	30	
UU	2.1	3.3	44	
ZZ	1.4	4.7	108	J DET/A



LDC #: 31254A2b**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**Page: 1 of 1  
Reviewer BR  
2<sup>nd</sup> Reviewer SM

METHOD: GC/MS SVOA (EPA SW 846 Method 8270DSIM)

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

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 $A_x$  = Area of Compound $C_x$  = Concentration of compound, $S$  = Standard deviation of the RRFs, $A_{is}$  = Area of associated internal standard $C_{is}$  = Concentration of internal standard $X$  = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (1 std)	Recalculated RRF (1 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	HP10976	12/3/2013	N-Nitrosodimethylamine (IS1)	1.188	1.188	1.169	1.169	3	3
			Naphthalene (IS2)	1.027	1.027	1.024	1.025	2	2
			Fluorene (IS3)	1.265	1.265	1.259	1.258	2	2
			Anthracene (IS4)	1.080	1.080	1.080	1.080	4	4
			Chrysene (IS5)	1.113	1.113	1.100	1.100	1	1
			Benzo(a)pyrene (IS6)	1.129	1.129	1.106	1.106	3	3

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# 31254A2b

# **VALIDATION FINDINGS WORKSHEET** **Continuing Calibration Results Verification**

Page: 1 of 2Reviewer: BR2nd Reviewer: 

METHOD: GC/MS SVOA (EPA SW 846 Method 8270DSIM)

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:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound

Cx = Concentration of compound

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial RRF)	Reported (CC RRF)	Recalculated (CC RRF)	Reported %D	Recalculated %D
1	IL0711	12/27/13	N-Nitrosodimethylamine (IS1)	1.169	1.191	1.191	2	2
			Naphthalene (IS2)	1.024	1.034	1.034	1	1
			Fluorene (IS3)	1.259	1.274	1.274	1	1
			Anthracene (IS4)	1.080	1.089	1.089	1	1
			Chrysene (IS5)	1.100	1.228	1.228	12	12
			Benzo(a)pyrene (IS6)	1.106	1.184	1.184	7	7

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



# **VALIDATION FINDINGS WORKSHEET** **Continuing Calibration Results Verification**

METHOD: GC/MS SVOA (EPA SW 846 Method 8270DSIM)

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:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound

Cx = Concentration of compound

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial RRF)	Reported (CC RRF)	Recalculated (CC RRF)	Reported %D	Recalculated %D
1	IL0751	12/29/13	N-Nitrosodimethylamine (IS1)	1.169	1.210	1.210	3	3
			Naphthalene (IS2)	1.024	1.042	1.042	2	2
			Fluorene (IS3)	1.259	1.274	1.274	1	1
			Anthracene (IS4)	1.080	1.089	1.089	1	1
			Chrysene (IS5)	1.100	1.204	1.204	9	9
			Benzo(a)pyrene (IS6)	1.106	1.200	1.200	9	9

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



# **VALIDATION FINDINGS WORKSHEET** **Surrogate Results Verification**

**METHOD:** GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	Fluoranthene-d10 1.50	0.838	84	84	0
2-Fluorobiphenyl	Benzo(a)pyrene-d12 1	0.870	87	87	0
Terphenyl-d14	1-methylnaphthalene-d10 2	1.062	106	106	0
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: \_\_\_\_\_

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID: \_\_\_\_\_

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					



# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where: SSC = Spiked sample concentration  
 SA = Spike added

SC = Sample concentration

$$\text{RPD} = | \text{MSC} - \text{MSD} | * 2 / (\text{MSC} + \text{MSDC})$$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8/9

Compound	Spike Added <i>(ug/kg)</i>		Sample Concentration <i>(ug/kg)</i>	Spiked Sample Concentration <i>(ug/kg)</i>		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
	MS	MSD		MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.22	33.22	0	28.04	30.15	84	84	90	<sup>89</sup> 89.91	7	7
Pentachlorophenol											
Pyrene	33.22	33.22	1.31	31.09	38.29	90	90	111	111	21	21

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 #: 31254A26

## VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationPage: 1 of 1Reviewer: BR2nd Reviewer: sm**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

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

% Recovery =  $100 * (SC/SA)$ 

Where: SSC = Spike concentration  
SA = Spike added

RPD =  $|LCS - LCSD| * 2 / (LCS + LCSD)$ 

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 348LGLCS

Compound	Spike Added		Spike Concentration		LCS		LCSD		LCS/LCSD	
	(ug/kg)		(ug/kg)		Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	—	31.63	—	95	95	—	—	—	—
Pentachlorophenol										
Pyrene	33.33	—	37.41	—	112	112	—	—	—	—

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.



## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

**METHOD:** GC/MS BNA (EPA SW 846 Method 8270C)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(V_i)(DF)(2.0)}{(A_r)(RRF)(V_o)(V_i)(\%S)}$$

$A_x$  = 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)

$V_1$  = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

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

2.0 = Factor of 2 to account for GPC cleanup

**Example:**

Sample I.D. 1, S

$$\text{Conc.} = \frac{(16359 \times 1 \times 1000 \times 1 \times 1)}{(23757 \times 1.024 \times 30.3 \times 0.47)} = 2.360933463 \text{ mg/l}$$

[illegible]



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** December 9, 2013

**LDC Report Date:** February 19, 2014

**Matrix:** Soil

**Parameters:** Chlorinated Pesticides

**Validation Level:** Level IV

**Laboratory:** Eurofins Lancaster Laboratories

**Sample Delivery Group (SDG):** PH142

**Sample Identification**

SL-514-NBZ-SB-0.0-0.5

SL-515-NBZ-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 SW 846 Method 8081B for Chlorinated Pesticides.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## I. Technical Holding Times

All technical holding time requirements were met.

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

## II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

## III. Initial Calibration

Initial calibration of single compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

## IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/16/13	CCV-MIXA3WM	RTX-CLP	Endosulfan II	24	SL-515-NBZ-SB-0.0-0.5 PBLK15347	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

Sample EB1-121113 (from SDG PH146) was identified as an equipment blank. No chlorinated pesticide contaminants were found.



Sample FB-041613 (from SDG PH032) was identified as a field blank. No chlorinated pesticide contaminants were found.

## **VI. Surrogate Spikes**

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

## **VII. Matrix Spike/Matrix Spike Duplicates**

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

## **VIII. Laboratory Control Samples (LCS)**

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

## **IX. Regional Quality Assurance and Quality Control**

Not applicable.

## **X. Florisil Cartridge Check**

Florisil cleanup was not required and therefore not performed in this SDG.

## **XI. GPC Calibration**

GPC cleanup was not required and therefore not performed in this SDG.

## **XII. Target Compound Identification**

All target compound identifications were within validation criteria.

## **XIII. Compound Quantitation**

All compound quantitations were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-514-NBZ-SB-0.0-0.5	4,4'-DDT	43	J (all detects)	A
SL-515-NBZ-SB-0.0-0.5	4,4'-DDE	74	J (all detects)	A



All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH142	All compounds reported below the RL.	J (all detects)	A

#### **XIV. Overall Assessment of Data**

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

#### **XV. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Data Qualification Summary - SDG PH142**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH142	SL-515-NBZ-SB-0.0-0.5 PBLK15347	Endosulfan II	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
PH142	SL-514-NBZ-SB-0.0-0.5	4,4'-DDT	J (all detects)	A	Compound quantitation (*XIII) (RPD)
PH142	SL-515-NBZ-SB-0.0-0.5	4,4'-DDE	J (all detects)	A	Compound quantitation (*XIII) (RPD)
PH142	SL-514-NBZ-SB-0.0-0.5 SL-515-NBZ-SB-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG



**METHOD:** GC Chlorinated Pesticides (EPA SW846 Method 8081<sup>B</sup>)

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: 12/9/13
II.	GC/ECD Instrument Performance Check	A	
III.	Initial calibration	A	RSD ≤ 20%
IV.	Continuing calibration/ICV	SW	1CW/1CV ≤ 20%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client spec.
VIII.	Laboratory control samples	A	LCS
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW A or	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	ND	EB1 = EB1 - 12/11/13 (SDG # PH142) FB = FB - 04/16/13 (SDG # PH032)

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: SDI

1	SL-514-NBZ-SB-0.0-0.5	11		21		31	PRLK15347
2	SL-515-NBZ-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: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**Method:** Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. GC/ECD Instrument performance check</b>				
Was the instrument performance found to be acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) $\leq$ 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the required standard concentrations analyzed in the initial calibration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
What type of continuing calibration calculation was performed? <input checked="" type="checkbox"/> %D or <input type="checkbox"/> %R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were endrin and 4,4'-DDT breakdowns $\leq$ 15%.0 for individual breakdown in the Evaluation mix standards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) $\leq$ 20%.0 or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were extract cleanup blanks analyzed with every batch requiring clean-up?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	



Validation Area	Yes	No	NA	Findings/Comments
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>			
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>			
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		<input checked="" type="checkbox"/>		
Were the performance evaluation (PE) samples within the acceptance limits?			<input checked="" type="checkbox"/>	
<b>X. Target compound identification</b>				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>			
<b>XI. Compound quantitation/CRQLs</b>				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	<input checked="" type="checkbox"/>			
<b>XII. System performance</b>				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		<input checked="" type="checkbox"/>		
Target compounds were detected in the field duplicates.			<input checked="" type="checkbox"/>	
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>			
Target compounds were detected in the field blanks.		<input checked="" type="checkbox"/>		



## VALIDATION FINDINGS WORKSHEET

**METHOD:** Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Aroclor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. Oxychlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



LDC #: 31254A3a

## VALIDATION FINDINGS WORKSHEET

### Continuing Calibration

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

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

Y N N/A Were Evaluation mix standards run before initial calibration and before samples?

Y	N	N/A	Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard (<15.0% for individual breakdowns)?
---	---	-----	---

Y	N	N/A	Was at least one standard run daily to verify the working curve?

Y ☒ N/A

Did the continuing calibration standards meet the percent difference (%D) / relative percent difference (RPD) criteria of  $\leq 20.0\%$ ?

**Level IV/D Only**

✓ N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

[illegible]

A. alpha-BHC  
B. beta-BHC  
C. delta-BHC  
D. gamma-BHC

E. Heptachlor  
F. Aldrin  
G. Heptachlor epoxide  
H. Endosulfan I

I. Dieldrin  
J. 4,4'-DDE  
K. Endrin  
L. Endosulfan II

M. 4,4'-DDD  
N. Endosulfan sulfate  
O. 4,4'-DDT  
P. Methoxychlor

Q. Endrin ketone  
R. Endrin aldehyde  
S. alpha-Chlordane  
T. gamma-Chlordane

U. Toxaphene  
V. Aroclor-1016  
W. Aroclor-1221  
X. Aroclor-1232

Y. Aroclor-1242  
Z. Aroclor-1248  
AA. Aroclor-1254  
BB. Aroclor-1260

CC. DB 608  
DD. DB 1701  
EE. Hexachlobenzene  
FF.

GG. \_\_\_\_\_  
HH. \_\_\_\_\_  
II. \_\_\_\_\_  
JJ. \_\_\_\_\_



LDC #: 31254A3A

## VALIDATION FINDINGS WORKSHEET

### Compound Quantitation and Reported CRQLs

Page: 1 of 1  
Reviewer: BR  
2nd Reviewer: Sm

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081,8082)

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

**Level IV/D Only**

Y	N	N/A	Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
---	---	-----	---

Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

[illegible]

Comments: See sample calculation verification worksheet for recalculations



LDC#: 31254A3a

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page: 1 of 1

Reviewer: BR

2nd Reviewer: 

METHOD: GC Pesticides (EPA SW 846 Method 8081B)

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

$$\%RSD = 100 * (S/X)$$

Where

 $A_x$  = 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	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/11/2013	Endosulfan I (RTX-CLP)	577000	576598	588000	588200	5	5
	H9191A		Methoxychlor (RTX-CLP)	243000	242738	243000	243400	2	2
			Endosulfan I (RTX-CLPII)	77300	77278	79100	79080	3	3
			Methoxychlor (RTX-CLPII)	46400	46400	47000	47000	1	1.5

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



LDC#: 31254A3a

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

Page: 1 of 1  
 Reviewer: BR  
 2nd Reviewer: *DM*

METHOD: GC Pesticides (EPA SW 846 Method 8081B)

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:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (\text{Ax})(\text{Cis}) / (\text{Ais})(\text{Cx})$$

Where:

ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

Ax = Area of compound,

Cx = Concentration of compound,

Ais = Area of associated internal standard

Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound	Average CF/ Conc	Reported Conc/CF (CC)	Recalculated Conc/CF (CC)	Reported % D	Recalculated %D
1	MIXA3WM	12/16/2013	Endosulfan I (RTX-CLP)	10.00	9.86	9.86	1	1
		19:20	Methoxychlor (RTX-CLP)	100.0	103.93	103.93	4	4
			Endosulfan I (RTX-CLPII)	10.00	9.31	9.31	7	7
			Methoxychlor (RTX-CLPII)	100.0	97.59	97.67	2	2
2	MIXA3WP	12/17/2013	Endosulfan I (RTX-CLP)	10.00	10.54	10.54	5	5
		8:50	Methoxychlor (RTX-CLP)	100.00	112.69	112.69	13	13
			Endosulfan I (RTX-CLPII)	10.00	9.89	9.89	1	1
			Methoxychlor (RTX-CLPII)	100.00	107.82	107.82	8	8

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



LDC #: 3125403a

# **VALIDATION FINDINGS WORKSHEET** **Surrogate Results Verification**

Page: 1 of 1

Reviewer: BR

2nd reviewer: CM

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found  
SS = Surrogate Spiked

Sample ID: \_\_\_\_\_

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene	RTX-CLP	10.1	8.492208	84	84	0
Decachlorobiphenyl	RTX-CLP	10.2	9.56314	94	94	0
Decachlorobiphenyl						

Sample ID: \_\_\_\_\_

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: \_\_\_\_\_

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: \_\_\_\_\_

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes: \_\_\_\_\_



LDC #: 3/25/13

**VALIDATION FINDINGS WORKSHEET**  
**Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification**

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

**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

% Recovery =  $100 * (SSC - SC) / SA$ 

Where: SSC = Spiked sample concentration  
SA = Spike added

SC = Concentration

RPD =  $|LCS - LCSD| * 2 / (LCS + LCSD)$ 

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 15347

Compound	Spike Added		Spiked Sample Concentration		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
					Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
	LCS	LCSD	LCS	LCSD						
gamma-BHC	3.42	—	3.89	—	114	117	—	—	—	—
4,4'-DDT	7.15	—	8.14	—	114	117	—	—	—	—
Aroclor 1260										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 31254A3a**VALIDATION FINDINGS WORKSHEET**  
**Sample Calculation Verification**Page: 1 of 1Reviewer: BR2nd reviewer: SM**METHOD:** GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)Y N N/A  
Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

KTX-CLPTI  
8.61Sample I.D. 1 0:

$$\text{Conc.} = \frac{(141195)(10)}{(83357.7)(30)(.92)}$$
$$= 0.613711855 \text{ } \mu\text{g/l}$$

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

Note: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 9, 2013  
**LDC Report Date:** February 10, 2014  
**Matrix:** Soil  
**Parameters:** Metals  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH142

**Sample Identification**

SL-516-NBZ-SB-0.0-0.5  
SL-516-NBZ-SB-4.0-5.0



## Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010C, 6020A and 7471B for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Molybdenum, Manganese, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## I. Technical Holding Times

All technical holding time requirements were met.

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

## II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

## III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

## IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Calcium Magnesium Tin Zinc	4.84 mg/Kg 2.30 mg/Kg 1.63 mg/Kg 0.233 mg/Kg	All samples in SDG PH142
ICB/CCB	Molybdenum Titanium Thallium	2.9 ug/L 2.5 ug/L 0.21 ug/L	All samples in SDG PH142

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-516-NBZ-SB-0.0-0.5	Tin	3.17 mg/Kg	3.17U mg/Kg
SL-516-NBZ-SB-4.0-5.0	Tin	2.93 mg/Kg	2.93U mg/Kg



Sample EB1-121113 (from SDG PH146) was identified as an equipment blank. No metal contaminants were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No metal contaminants were found with the following exceptions:

Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
FB-041613	4/16/13	Molybdenum Tin	0.0132 mg/L 0.0029 mg/L	All samples in SDG PH142

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

#### V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

#### VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-545-NBZ-SB-0.0-0.5MS/MSD (All samples in SDG PH142)	Antimony	63 (75-125)	62 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-545-NBZ-SB-0.0-0.5MS/MSD (All samples in SDG PH142)	Strontium	-	196 (75-125)	-	J (all detects)	A

#### VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

#### VIII. Laboratory Control Samples (LCS)

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



## **IX. Internal Standards**

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

## **X. ICP Serial Dilution**

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

## **XI. Sample Result Verification**

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG PH142	All analytes reported below the RL and above the MDL.	J (all detects)	A

## **XII. Overall Assessment of Data**

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

## **XIII. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**  
**Metals - Data Qualification Summary - SDG PH142**

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
PH142	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-SB-4.0-5.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH142	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-SB-4.0-5.0	Strontium	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH142	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-SB-4.0-5.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

**Santa Susana Field Laboratory**  
**Metals - Laboratory Blank Data Qualification Summary - SDG PH142**

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
PH142	SL-516-NBZ-SB-0.0-0.5	Tin	3.17U mg/Kg	A	B
PH142	SL-516-NBZ-SB-4.0-5.0	Tin	2.93U mg/Kg	A	B

**Santa Susana Field Laboratory**  
**Metals - Field Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG



LDC #: 31254A4

## VALIDATION COMPLETENESS WORKSHEET

Date: 2/5/14

SDG #: PH142

Level IV

Page: 1 of 1

Laboratory: Eurofins Lancaster Laboratories

Reviewer: CR

2nd Reviewer: SM

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	A	Sampling dates: 12/9/13
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	A	
VI.	Matrix Spike Analysis	SW	MS/PCPH139
VII.	Duplicate Sample Analysis	A	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	ICP Serial Dilution	A	
XI.	Sample Result Verification	A	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	SW	EB=EB1-12/11/13 FB=FB011613

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

(PH142)  
D = Duplicate  
TB = Trip blank  
EB = Equipment blank

(PH032)

Validated Samples:

soil

1	SL-516-NBZ-SB-0.0-0.5	11		21		31	
2	SL-516-NBZ-SB-4.0-5.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. ICP/MS Tune</b>				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were %RSD of isotopes in the tuning solution $\leq 5\%$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the proper number of standards used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all initial calibration correlation coefficients $> 0.995$ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. ICP Interference Check Sample</b>				
Were ICP interference check samples performed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Matrix spike/Matrix spike duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD or duplicate relative percent differences (RPD) $\leq 20\%$ for waters and $\leq 35\%$ for soil samples? A control limit of $\pm 2X$ RL ( $\pm 2X$ RL for soil) was used for samples that were $\leq 5X$ the RL, including when only one of the duplicate sample values were $\leq 5X$ the RL.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Validation Area	Yes	No	NA	Findings/Comments
<b>VIII. Furnace Atomic Absorption QC</b>				
If MSA was performed, was the correlation coefficients > 0.995?			/	
Do all applicable analyses have duplicate injections? (Level IV only)			/	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			/	
Were analytical spike recoveries within the 85-115% QC limits?			/	
<b>IX. ICP Serial Dilution</b>				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL (ICP/MS)?	/			
Were all percent differences (%Ds) < 10%?	/			
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.	/			
<b>X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)</b>				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	/			
If the %Rs were outside the criteria, was a reanalysis performed?	/			
<b>XI. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>XII. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target analytes were detected in the field duplicates.			/	
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target analytes were detected in the field blanks.	/			



[illegible]

CDMBoeingMet.wpd



LDC #: 31254A4

VALIDATION FINDINGS WORKSHEET  
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1

Reviewer: OL

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

Soil preparation factor applied: 100x

Reason: B

2nd Reviewer: SM

Sample Concentration units, unless otherwise noted: mg/Kg

Associated Samples: All

					Sample Identification									
Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (ug/L)	Maximum ICB/CCB <sup>a</sup> (ug/L)	Action Level	1	2								
Ca	4.84 <del>4.838</del>			24.19										
Mg	2.30 <del>2.298</del>			11.49										
Mo			2.9	1.45										
Sn	1.63 <del>1.627</del>			8.135	3.17	2.93								
Ti			2.5	1.45										
Tl			0.21	0.21										
Zn	0.233			1.165										

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.



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: mg/L Associated sample units: mg/Kg

Reason: F

Sampling date: 4/16/13 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-041613 (SDG: PH032)	Action Limit	No Qualifiers										
Mo	0.0132	6.60											
Sn	0.0029	1.45											

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 #: 51401A1

## VALIDATION FINDINGS WORKSHEET

### Matrix Spike/Matrix Spike Duplicates

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

**METHOD:** Trace metals (EPA SW 846 Method 6010B/6020A/7000)

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

④ Y N N/A

Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A

Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a fac of 4 or more, no action was taken.

(Y)N N/A

Were all duplicate sample relative percent differences (RPD)  $\leq 20\%$  for water samples and  $\leq 35\%$  for soil samples?

LEVEL IV ONLY:

Y N N/A

Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments:



LDC #: 3125447

# VALIDATION FINDINGS WORKSHEET Initial and Continuing Calibration Calculation Verification

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

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

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution  
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated	Reported	Acceptable (Y/N)
					%R	%R	
ICV	ICP (Initial calibration)	Ba	622.86	600	103.8	103.8	Y
↓	ICP/MS (Initial calibration)	Ag	52.19	50	104.4	104.4	Y
↓	CVAA (Initial calibration)	Hg	2.73	2.5	109.2	109.2	Y
CCV	ICP (Continuing calibration)	P	521.10	500	104.2	104.2	Y
↓	ICP/MS (Continuing calibration)	Tl	26.17	25	104.7	104.7	Y
↓	CVAA (Continuing calibration)	Hg	1.07	1	107.0	107.0	Y
	GFAA (Initial calibration)						
	GFAA (Continuing calibration)						

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



LDC #: 3125449

# VALIDATION FINDINGS WORKSHEET Level IV Recalculation Worksheet

Page: 1 of 1  
Reviewer: gr  
2nd Reviewer: SR

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

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).  
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration  
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (mg/L)  
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD / %D	%R / RPD / %D	
ICSAB	ICP interference check	Pb	49.3	50	98.6	98.6	Y
LCS	Laboratory control sample	Hg	0.1	0.1	100	100	Y
SL-545-NBZ	Matrix spike SB-00-0.5	Sh	(SSR-SR) 30.7735	49.0196	63	63	Y
↓	Duplicate	Pb	66.1333	63.8245	4	4	Y
↓	ICP serial dilution	Sc	119.5	120.8	1	1	Y

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



LDC #: 5762041

## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

Page: 1 of 1

Reviewer: OR

2nd reviewer: Sam

**METHOD:** Trace Metals (EPA SW 846 Method 6010/6020/7000)

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

Y N N/A Have results been reported and calculated correctly?

Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?

Y N N/A Are all detection limits below the CRDL?

Detected analyte results for As were recalculated and verified using the following equation:

$$\text{Concentration} = \frac{(\text{RD})(\text{FV})(\text{Dil})}{(\text{In. Vol.})}$$

**Recalculation:**

RD	=	Raw data concentration
FV	=	Final volume (ml)
ln. Vol.	=	Initial volume (ml) or weight (G)
Dil	=	Dilution factor

$$I = \frac{100 \text{ mL} (2) (0.288 \text{ g/L})}{0.936 (1.035) (1000)} = 0.0598 \text{ mg/kg}$$

[illegible]

Note: \_\_\_\_\_



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 9, 2013  
**LDC Report Date:** February 18, 2014  
**Matrix:** Soil/Water  
**Parameters:** Total Petroleum Hydrocarbons as Gasoline  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH142

**Sample Identification**

TB-120913  
SL-516-NBZ-SB-4.0-5.0  
SL-522-NBZ-SB-2.5-3.5



## Introduction

This data review covers 2 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for all compounds were less than or equal to 20.0%

## **III. Calibration Verification**

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-120913 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

Samples EB1-121113 and EB2-12113 (both from SDG PH146) were identified as equipment blanks. No total petroleum hydrocarbons as gasoline contaminants were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No total petroleum hydrocarbons as gasoline contaminants were found.

## **V. Surrogate Recovery**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

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



## **VII. Laboratory Control Samples**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## **VIII. Target Compound Identification**

All target compound identifications were within validation criteria.

## **IX. Compound Quantitation**

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 PH142	All compounds reported below the RL.	J (all detects)	A

## **X. System Performance**

The system performance was acceptable.

## **XI. Overall Assessment of Data**

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

## **XII. Field Duplicates**

No field duplicates were identified in this SDG.



**Santa Susana Field Laboratory**

**Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG PH142**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH142	TB-120913 SL-516-NBZ-SB-4.0-5.0 SL-522-NBZ-SB-2.5-3.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)

**Santa Susana Field Laboratory**

**Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**

**Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG



LDC #: 31254A7 **VALIDATION COMPLETENESS WORKSHEET**

SDG #: PH142

Level IV

Laboratory: Eurofins Lancaster Laboratories

Date: 2/13/14

Page: 1 of 1

Reviewer: BK

2nd Reviewer: SM

**METHOD:** GC TPH as Gasoline (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/13
II.	Initial calibration	A	LSD ≤ 20?
III.	Calibration verification/ICV	A	1CV/1CV ≤ 20?
IV.	Blanks	A	
V.	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client spec.
VII.	Laboratory control samples	A	LCS ID
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	TB = 1 EB1 = EB1-12/11/13 } SDG A PH142 EB2 = EB2-12/11/13 } FB = FB-04/16/13 (SDG A PH032)

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: water + soil

1	TB-120913	W	11		21		31	1	BLKAH
2	SL-516-NBZ-SB-4.0-5.0	S	12		22		32	2	BLKAC
3	SL-522-NBZ-SB-2.5-3.5	↓	13		23		33		
4			14		24		34		
5			15		25		35		
6			16		26		36		
7			17		27		37		
8			18		28		38		
9			19		29		39		
10			20		30		40		

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Method: X GC        HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>III. Continuing calibration</b>				
What type of continuing calibration calculation was performed? <u>X</u> %D or <u>      </u> %R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>V. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VI. Matrix spike/Matrix spike duplicates</b>				
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Validation Area	Yes	No	NA	Findings/Comments
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>X. Target compound identification</b>				
Were the retention times of reported detects within the RT windows?	/			
<b>XI. Compound quantitation/CRQLs</b>				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
<b>XII. System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.		/		
Target compounds were detected in the field duplicates.			/	
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	/			
Target compounds were detected in the field blanks.		/		




LDC #: 31254A7

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page 1 of 1

Reviewer: BR

2nd Reviewer: 

METHOD: GC X HPLC       

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

$CF = A/C$

average CF = sum of the CF/number of standards

$\%RSD = 100 * (S/X)$

Where:

A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (550 std)	Recalculated CF (550 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL 11379F J&W DB-MTB	9/27/2013	GRO	53902	53902	55635	55635	4	4

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



LDC #: 31254A7

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page 1 of 1Reviewer: BR

2nd Reviewer: \_\_\_\_\_

METHOD: GC X HPLC \_\_\_\_\_

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C

average CF = sum of the CF/number of standards

%RSD =  $100 * (S/X)$ 

Where:

A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (550 std)	Recalculated CF (550 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL 11002F Restek VRX	12/6/2013	GRO	4101	4101	4407	4407	9	8.5

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



LDC #: 31254A7

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

Page: 1 of 1  
Reviewer: BR  
2nd Reviewer: Sm

METHOD: GC X HPLC     

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

$$\text{Percent difference (\%D)} = 100 * (N - C) / N$$

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/CF	Reported Conc/CF	Recalculated Conc/CF	Reported % D	Recalculated %D
1	SGCKXGK	12/16/2013	GRO	220.04	209.72	209.72	5	5
	11379F	16:40						
2	WG20XUB	12/13/2013	GRO	550.10	550.07	550.07	0	0
	11002F	17:24						
3								

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



LDC #: 31254A7**VALIDATION FINDINGS WORKSHEET**  
**Surrogate Results Verification**Page: 1 of 1Reviewer: BR2nd reviewer: fyMETHOD: X GC    HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS \* 100

Where: SF = Surrogate Found

SS = Surrogate Spiked

Sample ID: 2

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Trifluorotoluene - F	JW DB-MTB	777	644.3802	90	90	0

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Trifluorotoluene - F	JW DB-VRX	300	22.9536	77	77	0

Sample ID:   

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 31254A7

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: BR2nd Reviewer: SMMETHOD: X GC    HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery =  $100 * (SSC - SC) / SA$ 

Where SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

RPD =  $((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD) * 100$ 

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS & 8 / LCSD FA

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	11	9.16	9.52	83	83	87	87	4	4
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 31254A7VALIDATION FINDINGS WORKSHEET  
Sample Calculation VerificationPage: 1 of 1Reviewer: BR2nd Reviewer: SLMETHOD: ☒ GC ☐ HPLC☒ N N/A

Were all reported results recalculated and verified for all level IV samples?

☒ N N/A

Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration=  $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$ 

Example:

Sample ID. ALL Compound Name ND $LC8 \& 8 = 9.16 \text{ mg/kg}$ Concentration =  $\frac{(23242220 - 2849573)(25)}{(55635)(1)(1000)}$   
 $= 9.16358722 \text{ mg/kg}$ 

A= Area or height of the compound to be measured

Fv= Final Volume of extract

Df= Dilution Factor

RF= Average response factor of the compound  
In the initial calibration

Vs= Initial volume of the sample

Ws= Initial weight of the sample

%S= Percent Solid

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Laboratory Data Consultants, Inc.  
Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 9, 2013  
**LDC Report Date:** February 19, 2014  
**Matrix:** Soil  
**Parameters:** Total Petroleum Hydrocarbons as Extractables  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH142

**Sample Identification**

SL-516-NBZ-SB-0.0-0.5  
SL-516-NBZ-SB-4.0-5.0  
SL-513-NBZ-SB-0.0-0.5  
SL-522-NBZ-SB-0.0-0.5  
SL-523-NBZ-SB-0.0-0.5  
SL-524-NBZ-SB-0.0-0.5  
SL-824-NBZ-SB-0.0-0.5  
SL-522-NBZ-SB-2.5-3.5  
SL-524-NBZ-SB-0.0-0.5MS  
SL-524-NBZ-SB-0.0-0.5MSD



## Introduction

This data review covers 10 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

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

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

## **III. Calibration Verification**

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractables contaminants were found in the method blanks.

Samples EB1-121113 and EB2-121113 (both from SDG PH146) were identified as equipment blanks. No total petroleum hydrocarbons as extractables contaminants were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No total petroleum hydrocarbons as extractables contaminants were found.

## **V. Surrogate Recovery**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:



Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-524-NBZ-SB-0.0-0.5MS/MSD (SL-524-NBZ-SB-0.0-0.5)	EFH (C15-C20)	-	15 (49-123)	40 (≤20)	J (all detects) UJ (all non-detects)	A

## VII. Laboratory Control Samples

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

## VIII. Target Compound Identification

All target compound identifications were within validation criteria.

## IX. Compound Quantitation

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 PH142	All compounds reported below the RL.	J (all detects)	A

## X. System Performance

The system performance was acceptable.

## XI. Overall Assessment of Data

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

## XII. Field Duplicates

Samples SL-524-NBZ-SB-0.0-0.5 and SL-824-NBZ-SB-0.0-0.5 were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
EFH (C15-C20)	8.4	2.2	117 (≤50)	J (all detects)	A
EFH (C21-C30)	58	28	70 (≤50)	J (all detects)	A



Compound	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
EFH (C30-C40)	120	50	82 (≤50)	J (all detects)	A



**Santa Susana Field Laboratory****Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG PH142**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH142	SL-524-NBZ-SB-0.0-0.5	EFH (C15-C20)	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (RPD) (Q)
PH142	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-SB-4.0-5.0 SL-513-NBZ-SB-0.0-0.5 SL-522-NBZ-SB-0.0-0.5 SL-523-NBZ-SB-0.0-0.5 SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5 SL-522-NBZ-SB-2.5-3.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation (Z)
PH142	SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)

**Santa Susana Field Laboratory****Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory****Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG



LDC #: 31254A8

## VALIDATION COMPLETENESS WORKSHEET

Date: 2/13/14

SDG #: PH142

Level IV

Page: 1 of 1

Laboratory: Eurofins Lancaster Laboratories

Reviewer: BR

2nd Reviewer: SM

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/13
II.	Initial calibration	A	RSD ≤ 20%
III.	Calibration verification/ICV	A	1 CV/ICV ≤ 20%
IV.	Blanks	A	
V.	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW A <sup>m</sup>	FD = 6 + 7
XIII.	Field blanks	ND	FB = FB-041613 (SDG# P#032)

EQ = EB1-121113 EB2 = EB2-121113

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

(SDG # P#196)

Validated Samples: SDI

1	SL-516-NBZ-SB-0.0-0.5	11	21	31	PBLK24350
2	SL-516-NBZ-SB-4.0-5.0	12	22	32	
3	SL-513-NBZ-SB-0.0-0.5	13	23	33	
4	SL-522-NBZ-SB-0.0-0.5	14	24	34	
5	SL-523-NBZ-SB-0.0-0.5	15	25	35	
6	SL-524-NBZ-SB-0.0-0.5	16	26	36	
7	SL-824-NBZ-SB-0.0-0.5	17	27	37	
8	SL-522-NBZ-SB-2.5-3.5	18	28	38	
9	SL-524-NBZ-SB-0.0-0.5MS	19	29	39	
10	SL-524-NBZ-SB-0.0-0.5MSD	20	30	40	

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Method: X GC        HPLC

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cooler temperature criteria was met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>II. Initial calibration</b>				
Did the laboratory perform a 5 point calibration prior to sample analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did the initial calibration meet the curve fit acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Were the RT windows properly established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IV. Continuing calibration</b>				
What type of continuing calibration calculation was performed? <u>X</u> %D or <u>      </u> %R	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a continuing calibration analyzed daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all percent differences (%D) < 20% or percent recoveries 80-120%?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all the retention times within the acceptance windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>V. Blanks</b>				
Was a method blank associated with every sample in this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a method blank analyzed for each matrix and concentration?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VI. Surrogate spikes</b>				
Were all surrogate %R within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>VII. Matrix spike/Matrix spike duplicates</b>				
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was a MS/MSD analyzed every 20 samples of each matrix?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>VIII. Laboratory control samples</b>				
Was an LCS analyzed for this SDG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was an LCS analyzed per extraction batch?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Validation Area	Yes	No	NA	Findings/Comments
<b>IX. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were the performance evaluation (PE) samples within the acceptance limits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>X. Target compound identification</b>				
Were the retention times of reported detects within the RT windows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>XI. Compound quantitation/CRQLs</b>				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>XII. System performance</b>				
System performance was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field duplicates.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>XV. Field blanks</b>				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target compounds were detected in the field blanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



LDC #: 31254A8

## VALIDATION FINDINGS WORKSHEET

### Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1

Reviewer: BR

2nd Reviewer: SM

METHOD: ☒ GC ☐ HPLC

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

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Were an MS/MSD) analyzed for every 20 samples for each matrix or whenever a sample extraction was performed?

Y ☒ N ☐ N/A ☐ Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

[illegible]



## Field Duplicates

Reviewer: BR2nd Reviewer: SM

Method: GC TPH (EPA SW 846 Method 8015B)

Analyte	Concentration (mg/kg)		RPD (≤50 )	Qualifiers (Parents Only) CODE: FD
	6	7		
EFH (C15-C20)	8.4	2.2	117	J DET/A
EFH (C21-C30)	58	28	70	J DET/A
EFH (C30-C40)	120	50	82	J DET/A



LDC #: 31254A8

**VALIDATION FINDINGS WORKSHEET**  
**Initial Calibration Calculation Verification**

Page 1 of 1Reviewer: BR2nd Reviewer: SMMETHOD: GC X HPLC \_\_\_\_\_

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C

average CF = sum of the CF/number of standards

%RSD = 100 \* (S/X)

Where:

A = Area of compound

C = Concentration of compound

S = Standard deviation of calibration factors

X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (144 std)	Recalculated CF (144 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL CP23-19879B ZB-5	8/19/2013	C8-C40	25401	25401	27097	27097	10%	10%

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 #: 31254A8

**VALIDATION FINDINGS WORKSHEET**  
**Continuing Calibration Calculation Verification**

Page: 1 of 1  
Reviewer: BR  
2nd Reviewer: Sy

METHOD: GC\_\_\_\_HPLC\_\_\_\_

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

Percent difference (%D) =  $100 * (N - C)/N$ 

Where:

N = Initial Calibration Factor or Nominal Amount

C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc/CF	Reported Conc/CF	Recalculated Conc/CF	Reported % D	Recalculated %D
1	TPH_3GI	12/18/2013	C8-C40	288.01	306.25	306.25	6	6
		4:23						
2	TPH_3G1	12/18/2013	C8-C40	288.01	293.36	293.36	2	2
	J351B.0081	21:05						
3								

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



LDC #: 31254A8**VALIDATION FINDINGS WORKSHEET**  
**Surrogate Results Verification**Page: 1 of 1Reviewer: BR2nd reviewer: SMMETHOD: X GC    HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery:  $SF/SS * 100$ Where: SF = Surrogate Found  
SS = Surrogate SpikedSample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Chlorobenzene	205	1.9868	1.6240	82	82	0
Ortho-terphenyl	↓	↓	1.6960	85	85	0

Sample ID:   

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:   

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	



LDC #: 3125458

# **VALIDATION FINDINGS WORKSHEET** **Matrix Spike/Matrix Spike Duplicates Results Verification**

Page: 1 of 1Reviewer: BR2nd Reviewer: [Signature]METHOD: X GC    HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 \* (SSC - SC)/SA

Where

SSC = Spiked sample concentration

MS = Matrix spike

SC = Sample concentration

MSD = Matrix spike duplicate

SA = Spike added

RPD = (((SSCMS - SSCMSD) \* 2) / (SSCMS + SSCMSD)) \* 100

MS/MSD samples: 9/10

Compound	Spike Added		Sample Conc.	Spike Sample Concentration		Matrix spike		Matrix Spike Duplicate		MS/MSD	
	(mg/kg)			(mg/kg)	(mg/kg)	Percent Recovery		Percent Recovery		RPD	
	MS	MSD				Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
				MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EFH (C8-C11)	4.98	4.98	0	3.94	4.09	79	79	82	82	4	3.7

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



LDC #: 3/25488

## VALIDATION FINDINGS WORKSHEET

Page: 1 of 1Laboratory Control Sample/Laboratory Control Sample Duplicates Results VerificationReviewer: BR2nd Reviewer: SmMETHOD: X GC    HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where SSC = Spiked sample concentration

SC = Sample concentration

SA = Spike added

$$\text{RPD} = (((\text{SSCLCS} - \text{SSCLCSD}) * 2) / (\text{SSCLCS} + \text{SSCLCSD})) * 100$$

LCS = Laboratory Control Sample

LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 24350

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C8-C11)	5.02	—	3.77	—	75		—	—	—	—

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.



LDC #: 31254A8VALIDATION FINDINGS WORKSHEET  
Sample Calculation VerificationPage: 1 of 1  
Reviewer: BR  
2nd Reviewer: SmMETHOD: X GC \_\_\_ HPLCY N N/A  
Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds within 10% of the reported results?

21 mg/kg

Concentration=  $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$ 

Example:

Sample ID. 1 Compound Name EP4 C30-C40

A= Area or height of the compound to be measured

Fv= Final Volume of extract

Df= Dilution Factor

RF= Average response factor of the compound  
In the initial calibration

Vs= Initial volume of the sample

Ws= Initial weight of the sample

%S= Percent Solid

$$\text{Concentration} = \frac{(16335800)(1500)}{(27097)(30.2)(0.436)(100)} \\ = 21.32732586 \text{ mg/kg}$$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory  
**Collection Date:** December 9, 2013  
**LDC Report Date:** February 10, 2014  
**Matrix:** Soil  
**Parameters:** Nitrate as Nitrogen  
**Validation Level:** Level IV  
**Laboratory:** Eurofins Lancaster Laboratories  
**Sample Delivery Group (SDG):** PH142

**Sample Identification**

SL-522-NBZ-SB-0.0-0.5  
SL-523-NBZ-SB-0.0-0.5  
SL-524-NBZ-SB-0.0-0.5  
SL-824-NBZ-SB-0.0-0.5  
SL-522-NBZ-SB-2.5-3.5  
SL-524-NBZ-SB-0.0-0.5MS  
SL-524-NBZ-SB-0.0-0.5DUP



## Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 300.0 for Nitrate as Nitrogen.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

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

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- NJ Presumptive evidence of presence of the compound at an estimated quantity.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.
- None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.



## **I. Technical Holding Times**

All technical holding time requirements were met.

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

## **II. Initial Calibration**

All criteria for the initial calibration were met.

## **III. Continuing Calibration**

Continuing calibration frequency and analysis criteria were met.

## **IV. Blanks**

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Sample EB2-121113 (from SDG PH146) was identified as an equipment blank. No contaminant concentrations were found.

Sample FB-041613 (from SDG PH032) was identified as a field blank. No contaminant concentrations were found.

## **V. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-524-NBZ-SB-0.0-0.5MS (All samples in SDG PH142)	Nitrate as N	129 (80-120)	J (all detects)	A

## **VI. Duplicates**

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## **VII. Laboratory Control Samples**

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



## VIII. Sample Result Verification

All sample result verifications were acceptable.

All analytes reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG PH142	All analytes reported below the RL and above the MDL.	J (all detects)	A

## IX. Overall Assessment of Data

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

## X. Field Duplicates

Samples SL-524-NBZ-SB-0.0-0.5 and SL-824-NBZ-SB-0.0-0.5 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	SL-524-NBZ-SB-0.0-0.5	SL-824-NBZ-SB-0.0-0.5			
Nitrate as N	0.70	5.8	157 (≤50)	J (all detects)	A



**Santa Susana Field Laboratory**  
**Nitrate as Nitrogen - Data Qualification Summary - SDG PH142**

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
PH142	SL-522-NBZ-SB-0.0-0.5 SL-523-NBZ-SB-0.0-0.5 SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5 SL-522-NBZ-SB-2.5-3.5	Nitrate as N	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
PH142	SL-522-NBZ-SB-0.0-0.5 SL-523-NBZ-SB-0.0-0.5 SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5 SL-522-NBZ-SB-2.5-3.5	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
PH142	SL-524-NBZ-SB-0.0-0.5 SL-824-NBZ-SB-0.0-0.5	Nitrate as N	J (all detects)	A	Field duplicates (RPD) (FD)

**Santa Susana Field Laboratory**  
**Nitrate as Nitrogen - Laboratory Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG

**Santa Susana Field Laboratory**  
**Nitrate as Nitrogen - Field Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG



**METHOD: (Analyte)** Nitrate-N (EPA Method 300.0)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/13
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV.	Matrix Spike/Matrix Spike Duplicates	SW MS	
V.	Duplicates	A DUP	
VI.	Laboratory control samples	A LCS	
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW (3,4)	
X.	Field blanks	ND	EB=EB2-17113 FB=FB-04163

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

CPH146  
D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples:

Soil

1	SL-522-NBZ-SB-0.0-0.5	11		21		31	
2	SL-523-NBZ-SB-0.0-0.5	12		22		32	
3	SL-524-NBZ-SB-0.0-0.5	13		23		33	
4	SL-824-NBZ-SB-0.0-0.5	14		24		34	
5	SL-522-NBZ-SB-2.5-3.5	15		25		35	
6	SL-524-NBZ-SB-0.0-0.5MS	16		26		36	
7	SL-524-NBZ-SB-0.0-0.5DUP	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Method: Inorganics (EPA Method *See cover*)

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. Calibration</b>				
Were all instruments calibrated daily, each set-up time?	/			
Were the proper number of standards used?	/			
Were all initial calibration correlation coefficients > 0.995?	/			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	/			
Were titrant checks performed as required? (Level IV only)			/	
Were balance checks performed as required? (Level IV only)			/	
<b>III. Blanks</b>				
Was a method blank associated with every sample in this SDG?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
<b>IV. Matrix spike/Matrix spike duplicates and Duplicates</b>				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		/		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL (≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were ≤ 5X the CRDL.	/			
<b>V. Laboratory control samples</b>				
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 80-120% (85-115% for Method 300.0) QC limits?	/			
<b>VI. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?		/	/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	



LDC #: 31254A6

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2  
 Reviewer: OL  
 2nd Reviewer: SM

Validation Area	Yes	No	NA	Findings/Comments
<b>VII. Sample Result Verification</b>				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were detection limits < RL?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>VIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>IX. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target analytes were detected in the field duplicates.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>X. Field blanks</b>				
Field blanks were identified in this SDG.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Target analytes were detected in the field blanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



LDC #:\_

## VALIDATION FINDINGS WORKSHEET

### Matrix Spike Analysis

Page: 1 of 1

Reviewer: CA

2nd Reviewer: SN

**METHOD:** Inorganics, Method Sep over

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

Y N N/A

Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A

Were matrix spike percent recoveries (%R) within the control limits of 75-125 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

**LEVEL IV ONLY:**

Y N N/A

Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

[illegible]

Comments:



LDC: 31254A6

VALIDATION FINDINGS WORKSHEET  
Field Duplicates

Page: 1 of 1

Reviewer: GA

2nd Reviewer: SA

Method: Inorganics (see cover)

Analyte	Concentration (mg/Kg)		RPD (≤ 50)	Qualifiers (Parents Only)
	3	4		
Nitrate as N	0.70	5.8	157	Jdet/A (FD)



LDC #: 31254A6

**Validation Findings Worksheet**  
**Initial and Continuing Calibration Calculation Verification**

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

Method: Inorganics, Method See CoverThe correlation coefficient (r) for the calibration of NO<sub>3</sub>-N was recalculated. Calibration date: 12/16/13

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found} \times 100}{\text{True}}$$

Where,

Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/L)	Area	Recalculated	Reported	Acceptable (Y/N)
					r or r <sup>2</sup>	r or r <sup>2</sup>	
Initial calibration	NO <sub>3</sub> -N	s1	0.1	0.031	0.9999426	0.9999449	Y
		s2	0.4	0.122			
		s3	1	0.304			
		s4	2	0.619			
		s5	3	0.915			
Calibration verification	↓	ICV	1.5	1.505025	100	100	↓
Calibration verification	↓	CCV	↓	1.541219	103	103	
Calibration verification							

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



LDC #: 3125476VALIDATION FINDINGS WORKSHEET  
Level IV Recalculation WorksheetPage: 1 of 1  
Reviewer: QR  
2nd Reviewer: SNMETHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{\text{Found}}{\text{True}} \times 100$$
 Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).  
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$
 Where, S = Original sample concentration  
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated	Reported	Acceptable (Y/N)
					%R / RPD	%R / RPD	
LCS	Laboratory control sample	NO <sub>3</sub> -N	5.25	5	105	105	Y
6	Matrix spike sample	↓	(SSR-SR) 6.43	4.98	129	129	↓
7	Duplicate sample	↓	0.67	0.81	19	19	↓

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



LDC #: 31291A6

## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

Page: 1 of 1

Reviewer: OR

2nd reviewer: SM

METHOD: Inorganics, Method see cover

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

Y N N/A

Have results been reported and calculated correctly?

Y	N	N/A
---	---	-----

Are results within the calibrated range of the instruments?

Y N N/A

Are all detection limits below the CRQL?

Compound (analyte) results for NO<sub>3</sub><sup>-</sup> reported with a positive detect were recalculated and verified using the following equation:

Concentration =

Recalculation:

$$\frac{\text{Area}}{\text{slope}}$$

$$\frac{0.187 \text{ (50 mL)}}{0.3061} = 3.19 \text{ mg/kg}$$

[illegible]

Note: \_\_\_\_\_



**Laboratory Data Consultants, Inc.**  
**Data Validation Report**

**Project/Site Name:** Santa Susana Field Laboratory

**Collection Date:** December 9, 2013

**LDC Report Date:** February 12, 2014

**Matrix:** Soil

**Parameters:** Dioxins/Dibenzofurans

**Validation Level:** Level IV

**Laboratory:** Eurofins Lancaster Laboratories

**Sample Delivery Group (SDG):** PH142

**Sample Identification**

SL-516-NBZ-SB-0.0-0.5

SL-516-NBZ-SB-4.0-5.0



## Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA 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 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
BLK348002	12/14/13	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-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	0.0326 ng/Kg 0.0259 ng/Kg 0.0876 ng/Kg 0.213 ng/Kg 0.0310 ng/Kg 0.0161 ng/Kg 0.0232 ng/Kg 0.0688 ng/Kg 0.0437 ng/Kg 0.0211 ng/Kg 0.125 ng/Kg	All samples in SDG PH142

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-516-NBZ-SB-0.0-0.5	1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.101 ng/Kg 0.129 ng/Kg 0.0540 ng/Kg	0.101U ng/Kg 0.129U ng/Kg 0.0540U ng/Kg
SL-516-NBZ-SB-4.0-5.0	1,2,3,7,8-PeCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 1,2,3,4,7,8-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	0.0392 ng/Kg 0.0566 ng/Kg 0.285 ng/Kg 0.0646 ng/Kg 0.0296 ng/Kg 0.0225 ng/Kg 0.0309 ng/Kg 0.0275 ng/Kg 0.118 ng/Kg	0.0392U ng/Kg 0.0566U ng/Kg 0.285U ng/Kg 0.0646U ng/Kg 0.0296U ng/Kg 0.0225U ng/Kg 0.0309U ng/Kg 0.0275U ng/Kg 0.118U ng/Kg

Sample EB1-121113 (PH146) 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
EB1-121113	12/11/13	1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.460 pg/L 0.289 pg/L 0.464 pg/L 1.60 pg/L 0.622 pg/L 0.447 pg/L 0.658 pg/L 0.255 pg/L 0.189 pg/L 0.258 pg/L 0.623 pg/L 0.651 pg/L 0.666 pg/L	All samples in SDG PH142



Sample FB-041613 (from SDG PH032) 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-041613	4/16/13	1,2,3,7,8-PeCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,7,8,9-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF OCDF	0.434 pg/L 0.309 pg/L 0.838 pg/L 0.324 pg/L 0.429 pg/L 0.257 pg/L 0.241 pg/L 0.284 pg/L 0.314 pg/L 0.357 pg/L	All samples in SDG PH142

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. Ongoing Precision Recovery (OPR)

Ongoing precision recovery samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within 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.

The 2,3,7,8-TCDF confirmation was performed with the following exceptions:



Sample	Compound	Finding	Criteria	Flag	A or P
SL-516-NBZ-SB-0.0-0.5	2,3,7,8-TCDF	2nd column confirmation was not performed for this compound.	2,3,7,8-TCDF 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 PH142	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 PH142**

SDG	Sample	Compound	Flag	A or P	Reason (Code)
PH142	SL-516-NBZ-SB-0.0-0.5	2,3,7,8-TCDF	None	P	Compound quantitation (column confirmation)
PH142	SL-516-NBZ-SB-0.0-0.5 SL-516-NBZ-SB-4.0-5.0	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 PH142**

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
PH142	SL-516-NBZ-SB-0.0-0.5	1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.101U ng/Kg 0.129U ng/Kg 0.0540U ng/Kg	A	B
PH142	SL-516-NBZ-SB-4.0-5.0	1,2,3,7,8-PeCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 1,2,3,4,7,8-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	0.0392 ng/Kg 0.0566 ng/Kg 0.285 ng/Kg 0.0646 ng/Kg 0.0296 ng/Kg 0.0225 ng/Kg 0.0309 ng/Kg 0.0275 ng/Kg 0.118 ng/Kg	A	B

**Santa Susana Field Laboratory****Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG PH142**

No Sample Data Qualified in this SDG



LDC #: 31254A21

## VALIDATION COMPLETENESS WORKSHEET

Date: 2-4-14

SDG #: PH142

Level IV

Page: 1 of 1

Laboratory: Eurofins Lancaster Laboratories

Reviewer: SM2nd Reviewer: SM

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

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/13
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	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	A	
XI.	Compound quantitation/RL/LOQ/LOD	ASW	
XII.	System performance	A	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	SW	EB=EB1-121113 (PH146)

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

FB=FB-041613 (PH032)

Validated Samples:

See

1	SL-516-NBZ-SB-0.0-0.5	11		21		31	
2	SL-516-NBZ-SB-4.0-5.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19	BLK 348002	29		39	
10		20		30		40	

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



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

Validation Area	Yes	No	NA	Findings/Comments
<b>I. Technical holding times</b>				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
<b>II. GC/MS Instrument performance check</b>				
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 $\leq 25\%$ ?	/			
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?	/			
<b>III. Initial calibration</b>				
Was the initial calibration performed at 5 concentration levels?	/			
Were all percent relative standard deviations (%RSD) $\leq 20\%$ for unlabeled compounds and $\leq 35\%$ for labeled compounds?	/			
Did all calibration standards meet the Ion Abundance Ratio criteria?	/			
Was the signal to noise ratio for each target compound $\geq 2.5$ and for each recovery and internal standard $> 10$ ?	/			
<b>IV. Continuing calibration</b>				
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?	/			
<b>V. Blanks</b>				
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?	/			
<b>VI. Matrix spike/Matrix spike duplicates</b>				
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?			/	
<b>VII. Laboratory control samples</b>				
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
<b>VIII. Regional Quality Assurance and Quality Control</b>				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	
<b>IX. Internal standards</b>				
Were internal standard recoveries within the 25-150% criteria?	/			
Was the minimum S/N ratio of all internal standard peaks $\geq 10$ ?	/			
<b>X. Target compound identification</b>				
For 2,3,7,8 substituted congeners with associated labeled standards, were the retention times of the two quantitation peaks within $\pm 1$ 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 $\geq 2.5$ ?	/			
Does the maximum intensity of each specified characteristic ion coincide within $\pm 2$ seconds (includes labeled standards)?	/			
For PCDF identification, was any signal ( $S/N \geq 2.5$ , at $\pm$ seconds RT) detected in the corresponding PCDF channel?		/		
Was an acceptable lock mass recorded and monitored?	/			
<b>XI. Compound quantitation/CRQLs</b>				
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?	/			
<b>XII. System performance</b>				
System performance was found to be acceptable.	/			
<b>XIII. Overall assessment of data</b>				
Overall assessment of data was found to be acceptable.	/			
<b>XIV. Field duplicates</b>				
Field duplicate pairs were identified in this SDG.			/	
Target compounds were detected in the field duplicates.			/	
<b>XV. Field blanks</b>				
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: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# VALIDATION FINDINGS WORKSHEET Blanks

**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".

☒ N N/A Were all samples associated with a method blank?

☒ N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?

☒ N N/A Was the method blank contaminated?

Blank extraction date: 12/14/13 Blank analysis date: 12/17/13 Associated samples: All Qual U (B)

Conc. units: ng/kg

Compound	Blank ID	Sample Identification							
	BLK348002	5x	1	2					
B	0.0326*	0.163		0.0392*					
C	0.0259	0.130							
F	0.0876	0.438		0.0566*					
G	0.213*	1.07		0.285					
I	0.0310*	0.155		0.0646*					
K	0.0161*	0.081		0.0296*					
L	0.0232	0.116	0.101						
N	0.0688	0.344	0.129	0.0225*					
O	0.0437	0.219		0.0309*					
P	0.0211*	0.106	0.0540*	0.0275*					
Q	0.125	0.625		0.118*					

\*EMPC

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".



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: pg/L Associated sample units: ng/kg

Sampling date: 12/11/13

Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All >5x

Compound	Blank ID	Sample Identification								
	EB1-121113	5X								
B	0.460*	0.00230								
C	0.289	0.00145								
F	0.464*	0.00232								
G	1.60*	0.00800								
H	0.622*	0.00311								
I	0.447*	0.00224								
J	0.658*	0.00329								
K	0.255*	0.00128								
L	0.189*	0.00095								
N	0.258*	0.00129								
O	0.623*	0.00312								
P	0.651*	0.00326								
Q	0.666*	0.00333								

\* EMPC

EB1-121113 (PH146)

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:  
All contaminants within five times the blank concentration were qualified as not detected, "U".



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: pg/L Associated sample units: ng/kg

Sampling date: 04/16/13

Field blank type: (circle one) Field Blank / Rinsate / Other: FB Associated Samples: All &gt;5x

Compound	Blank ID	Sample Identification								
	FB-041613	5X								
B	0.434*	0.00217								
F	0.309*	0.00155								
G	0.838*	0.00419								
I	0.324	0.00162								
J	0.429*	0.00215								
K	0.257	0.00129								
N	0.241*	0.00121								
M	0.284*	0.00142								
O	0.314*	0.00157								
Q	0.357*	0.00179								

\* EMPC

FB-041613 (PH032)

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:  
All contaminants within five times the blank concentration were qualified as not detected, "U".

V:\Field Blanks\31254a21\_FB-041613.wpd



Y	N	N/A
Y	N	N/A

[illegible]

P:\Dx COMQUA\COMQUA\_CDM.wpd



# VALIDATION FINDINGS WORKSHEET Initial Calibration Calculation Verification

## 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	Recalculated	Reported	Recalculated	Reported	Recalculated
				Average RRF (initial)	Average RRF (initial)	RRF (CS3 std)	RRF (CS3 std)	%RSD	%RSD
1	ICAL	9-22-13	2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	1.008	1.008	1.043	1.043	4.15	4.14
	DF18471		2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	1.109	1.109	1.125	1.125	1.62	1.60
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	0.949	0.949	0.995	0.995	4.48	4.48
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8-HpCDD)	1.056	1.056	1.079	1.079	1.66	1.66
			OCDF ( $^{13}\text{C}$ -OCDF)	0.963	0.963	0.998	0.998	2.75	2.75
2			2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)						
			2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8-HpCDD)						
			OCDF ( $^{13}\text{C}$ -OCDF)						
3			2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)						
			2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8-HpCDD)						
			OCDF ( $^{13}\text{C}$ -OCDF)						

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



LDC #: 31254A21

# **VALIDATION FINDINGS WORKSHEET** **Routine Calibration Results Verification**

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

## **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:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

$A_x$  = Area of compound,

$C_x$  = Concentration of compound,

$A_{is}$  = Area of associated internal standard.

$C_{is}$  = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Spiked Conc (ng/mL)	Reported	Recalculated	Reported	Recalculated
					Conc (ng/mL)	Conc (ng/mL)	%R	%R
1	CS3C02	12-17-13	2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10	9.44	9.44	94	94
			2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10	9.23	9.23	92	92
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50	49.26	49.26	99	99
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50	46.76	46.75	94	94
			OCDF ( $^{13}\text{C}$ -OCDF)	100	94.97	95.00	95	95
2			2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10				
			2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10				
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50				
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50				
			OCDF ( $^{13}\text{C}$ -OCDF)	100				
3			2,3,7,8-TCDF ( $^{13}\text{C}$ -2,3,7,8-TCDF)	10				
			2,3,7,8-TCDD ( $^{13}\text{C}$ -2,3,7,8-TCDD)	10				
			1,2,3,6,7,8-HxCDD ( $^{13}\text{C}$ -1,2,3,6,7,8-HxCDD)	50				
			1,2,3,4,6,7,8-HpCDD ( $^{13}\text{C}$ -1,2,4,6,7,8,-HpCDD)	50				
			OCDF ( $^{13}\text{C}$ -OCDF)	100				

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.



# **VALIDATION FINDINGS WORKSHEET** **Laboratory Control Sample Results Verification**

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

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

% Recovery =  $100 \times \text{SSC} / \text{SA}$

Where: SSC = Spiked sample concentration  
SA = Spike added

$\text{RPD} = | \text{LCS} - \text{LCSD} | \times 2 / (\text{LCS} + \text{LCSD})$

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS ID: OPR 348002

Compound	Spike Added (ng/Kg)		Spiked Sample Concentration (ng/Kg)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
2,3,7,8-TCDD	20.0	NA	18.5	NA	92	92				
1,2,3,7,8-PeCDD	100		95.4		95	95				
1,2,3,4,7,8-HxCDD	100		95.6		96	96				
1,2,3,4,7,8,9-HpCDF	100		96.2		96	96				
OCDF	200		188		94	94				

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.



## VALIDATION FINDINGS WORKSHEET

### Sample Calculation Verification

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

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

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

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

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

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

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

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

Df = Dilution Factor.

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

**Example:**

Sample I.D. 1, A

$$\text{Conc.} = \frac{(200 + 209)(2000)(1)}{(405770 +)(1.008)(10.38)(.936)}$$

$$= 0.114 \text{ ng/Kg}$$

[illegible]



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH140**

Prepared for

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Prepared by

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February 27, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected on December 5, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) 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 (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)

Pesticides by EPA SW 846 Method 8081B

Polychlorinated Biphenyls (PCBs) by EPA SW 846 Method 8082A

Metals by EPA SW 846 Method 6010C, 6020A, 7470A and 7471B

Herbicides by EPA SW 846 Method 8151A

Total Petroleum Hydrocarbons (TPH) as Extractables by EPA SW 846 Method 8015M

Dioxins and Dibenzofurans by EPA Method 1613B

Wet Chemistry:

Cyanide EPA Method 9012B

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards (dioxins only), matrix spike/matrix spike duplicates (MS/MSD), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), method blanks, equipment blanks, field blanks and field duplicate samples. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of ICB/CCBs, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

Initial Calibration data were not reviewed for level III.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for level III.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of several blanks for SVOCs, herbicides, metals and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

## **V. Surrogate Spikes**

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the exception of one sample for PCBs. The associated sample results were qualified as non-detected estimated (UJ). The details regarding the qualification of data are provided in Enclosure I.

## **VI. ICP Interference Check Sample (ICS) Analysis**

ICP interference check data were not reviewed for level III.

## **VII. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed at the required frequency. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one MS/MSD pair for herbicides and TPH as extractables. No data were qualified for due to high %Rs since the associated results were non-detected.

## **VIII. Laboratory Duplicates Sample**

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



## IX. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of several LCS/LCSD pairs for SVOCs, herbicides and PCBs. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ). The details regarding the qualification of data are provided in Enclosure I.

## X. Internal Standards

Internal standards were reviewed for dioxins. Percent recoveries (%R) were within QC limits.

## XI. ICP Serial Dilution

ICP serial dilution was not performed for this SDG.

## XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH140	All compounds reported as detected below the RL.	J (all detects)	A

## XIII. Field Duplicate Samples

One field duplicate pair was collected and analyzed for herbicides and TPH as extractables. All RPDs were within QC limits. The field duplicate is identified in Attachment 1.

## XIV. Field Blank Samples

No trip blanks were identified in this SDG.

Two equipment blanks were collected and analyzed for SVOCs, pesticides, PCBs, metals, herbicides, TPH as extractables, dioxins and cyanide. The equipment blanks had detections for SVOCs, metals and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the equipment blanks, therefore no data were qualified. Note that EB1-120513 was collected and analyzed for SVOCs, pesticides, PCBs, TPH as extractables and dioxins as part of this SDG but was not associated to any samples.

One field blank (from SDG PH032) was collected and analyzed for SVOCs, pesticides, PCBs, metals, herbicides, TPH as extractables, dioxins and cyanide. The field blank had detections for SVOCs, metals and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the field blank, therefore no data were qualified.



## **XV. Overall Assessment of Data**

The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. The remainder of the data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



## **Attachment 1**

### **Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Dec-2013	SL-525-NBZ-SB-0.0-0.5	7306301	N	3546	8015M	III
05-Dec-2013	SL-525-NBZ-SB-0.0-0.5	7306301	N	3550B	8151A	III
05-Dec-2013	SL-525-NBZ-SB-4.0-5.0	7306302	N	3546	8015M	III
05-Dec-2013	SL-525-NBZ-SB-4.0-5.0	7306302	N	3550B	8151A	III
05-Dec-2013	SL-525-NBZ-SB-4.0-5.0MS	7306303	MS	3546	8015M	III
05-Dec-2013	SL-525-NBZ-SB-4.0-5.0MS	7306303	MS	3550B	8151A	III
05-Dec-2013	SL-525-NBZ-SB-4.0-5.0MSD	7306304	MSD	3546	8015M	III
05-Dec-2013	SL-525-NBZ-SB-4.0-5.0MSD	7306304	MSD	3550B	8151A	III
05-Dec-2013	SL-527-NBZ-SB-0.0-0.5	7306308	N	3546	8081B	III
05-Dec-2013	SL-527-NBZ-SB-0.0-0.5	7306308	N	3546	8082A	III
05-Dec-2013	SL-527-NBZ-SB-0.0-0.5	7306308	N	3546	8270D SIM	III
05-Dec-2013	SL-527-NBZ-SB-0.0-0.5	7306308	N	METHOD	1613B	III
05-Dec-2013	SL-529-NBZ-SB-0.0-0.5	7306310	N	3546	8081B	III
05-Dec-2013	SL-529-NBZ-SB-0.0-0.5	7306310	N	3546	8082A	III
05-Dec-2013	SL-529-NBZ-SB-0.0-0.5	7306310	N	3546	8270D SIM	III
05-Dec-2013	SL-529-NBZ-SB-0.0-0.5	7306310	N	METHOD	1613B	III
05-Dec-2013	SL-527-NBZ-SB-0.0-0.5MSD	P306308M241117A	MSD	3546	8082A	III
05-Dec-2013	SL-527-NBZ-SB-0.0-0.5MS	P306308R241058A	MS	3546	8082A	III
05-Dec-2013	SL-825-NBZ-SB-4.0-5.0	7306305	FD	3546	8015M	III
05-Dec-2013	SL-825-NBZ-SB-4.0-5.0	7306305	FD	3550B	8151A	III
05-Dec-2013	SL-526-NBZ-SB-0.0-0.5	7306306	N	3546	8015M	III
05-Dec-2013	SL-526-NBZ-SB-0.0-0.5	7306306	N	3546	8081B	III
05-Dec-2013	SL-526-NBZ-SB-0.0-0.5	7306306	N	3550B	8151A	III
05-Dec-2013	SL-526-NBZ-SB-2.5-3.5	7306307	N	3546	8015M	III
05-Dec-2013	SL-526-NBZ-SB-2.5-3.5	7306307	N	3546	8081B	III
05-Dec-2013	SL-526-NBZ-SB-2.5-3.5	7306307	N	3550B	8151A	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
05-Dec-2013	SL-528-NBZ-SB-0.0-0.5	7306309	N	3546	8081B	III
05-Dec-2013	SL-528-NBZ-SB-0.0-0.5	7306309	N	3546	8082A	III
05-Dec-2013	SL-528-NBZ-SB-0.0-0.5	7306309	N	3546	8270D SIM	III
05-Dec-2013	SL-528-NBZ-SB-0.0-0.5	7306309	N	METHOD	1613B	III
05-Dec-2013	EB1-120513	7306298	EB	3510C	8015M	III
05-Dec-2013	EB1-120513	7306298	EB	3510C	8081B	III
05-Dec-2013	EB1-120513	7306298	EB	3510C	8082A	III
05-Dec-2013	EB1-120513	7306298	EB	3510C	8270D SIM	III
05-Dec-2013	EB1-120513	7306298	EB	METHOD	1613B	III
05-Dec-2013	EB2-120513	7306299	EB	3005A	6010C	III
05-Dec-2013	EB2-120513	7306299	EB	3510C	8015M	III
05-Dec-2013	EB2-120513	7306299	EB	3510C	8081B	III
05-Dec-2013	EB2-120513	7306299	EB	3510C	8270D SIM	III
05-Dec-2013	EB2-120513	7306299	EB	M3010A	6020A	III
05-Dec-2013	EB2-120513	7306299	EB	METHOD	1613B	III
05-Dec-2013	EB2-120513	7306299	EB	METHOD	7470A	III
05-Dec-2013	EB2-120513	7306299	EB	METHOD	8151A	III
05-Dec-2013	EB3-120513	7306300	EB	3005A	6010C	III
05-Dec-2013	EB3-120513	7306300	EB	3510C	8015M	III
05-Dec-2013	EB3-120513	7306300	EB	3510C	8081B	III
05-Dec-2013	EB3-120513	7306300	EB	3510C	8082A	III
05-Dec-2013	EB3-120513	7306300	EB	3510C	8270D SIM	III
05-Dec-2013	EB3-120513	7306300	EB	M3010A	6020A	III
05-Dec-2013	EB3-120513	7306300	EB	METHOD	1613B	III
05-Dec-2013	EB3-120513	7306300	EB	METHOD	7470A	III
05-Dec-2013	EB3-120513	7306300	EB	METHOD	8151A	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-Dec-2013	EB3-120513	7306300	EB	METHOD	9012B	III



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PrepPH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** AQ

Sample ID: EB2-120513

Collected: 12/5/2013 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
ZINC	0.0048	J	0.0020	MDL	0.0400	PQL	mg/L	U	B

Sample ID: EB3-120513

Collected: 12/5/2013 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
ZINC	0.0062	J	0.0020	MDL	0.0400	PQL	mg/L	U	B

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** AQ

Sample ID: EB1-120513

Collected: 12/5/2013 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-HPCDF	0.815	JBQ	0.279	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.583	JBQ	0.401	MDL	9.91	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.488	JBQ	0.395	MDL	9.91	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.646	JQ	0.499	MDL	9.91	PQL	pg/L	J	Z
OCDD	1.48	JB	1.05	MDL	19.8	PQL	pg/L	U	B

Sample ID: EB2-120513

Collected: 12/5/2013 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
2,3,4,7,8-PECDF	0.627	JBQ	0.538	MDL	9.74	PQL	pg/L	U	B
OCDD	1.88	JBQ	1.66	MDL	19.5	PQL	pg/L	U	B

Sample ID: EB3-120513

Collected: 12/5/2013 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	0.436	JQ	0.207	MDL	9.80	PQL	pg/L	J	Z
1,2,3,4,6,7,8-HPCDF	0.380	JBQ	0.0657	MDL	9.80	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.446	JBQ	0.0796	MDL	9.80	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.225	JQ	0.105	MDL	9.80	PQL	pg/L	J	Z
1,2,3,6,7,8-HXCDF	0.118	JBQ	0.106	MDL	9.80	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.353	JBQ	0.175	MDL	9.80	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.390	J	0.118	MDL	9.80	PQL	pg/L	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PrepPH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** AQ

**Sample ID:** EB3-120513

**Collected:** 12/5/2013 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
1,2,3,7,8-PECDD	0.635	JQ	0.285	MDL	9.80	PQL	pg/L	J	Z
1,2,3,7,8-PECDF	0.499	JQ	0.160	MDL	9.80	PQL	pg/L	J	Z
2,3,4,7,8-PECDF	0.244	JBQ	0.151	MDL	9.80	PQL	pg/L	U	B
OCDD	1.64	JBQ	0.236	MDL	19.6	PQL	pg/L	U	B
OCDF	1.02	JBQ	0.257	MDL	19.6	PQL	pg/L	U	B

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

**Sample ID:** SL-527-NBZ-SB-0.0-0.5

**Collected:** 12/5/2013 10:45:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.33	JB	0.0415	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.299	JB	0.0520	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.531	JB	0.0726	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.353	JB	0.0594	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	1.27	JB	0.0763	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.414	JB	0.0542	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	1.05	JB	0.0736	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.138	JB	0.0636	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.709	JBQ	0.0976	MDL	5.61	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.352	JB	0.0456	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.321	JB	0.0571	MDL	5.61	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.468	JB	0.0435	MDL	5.61	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.115	JBQ	0.0840	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.347	JB	0.0900	MDL	1.12	PQL	ng/Kg	J	Z
OCDF	5.93	JB	0.0661	MDL	11.2	PQL	ng/Kg	J	Z

**Sample ID:** SL-528-NBZ-SB-0.0-0.5

**Collected:** 12/5/2013 12:05:00

**Analysis Type:** RES

**Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.55	JB	0.0450	MDL	5.04	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.479	JBQ	0.0275	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0499	JBQ	0.0360	MDL	5.04	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PrepPH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-528-NBZ-SB-0.0-0.5

Collected: 12/5/2013 12:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.0766	JBQ	0.0437	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.0904	JB	0.0377	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.128	JB	0.0454	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.0527	JBQ	0.0351	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.135	JB	0.0442	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.123	JBQ	0.0422	MDL	5.04	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0794	JBQ	0.0297	MDL	5.04	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0951	JBQ	0.0365	MDL	5.04	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0939	JBQ	0.0276	MDL	5.04	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0850	JBQ	0.0572	MDL	1.01	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.114	JBQ	0.0615	MDL	1.01	PQL	ng/Kg	U	B
OCDF	1.11	JB	0.0633	MDL	10.1	PQL	ng/Kg	U	B

Sample ID: SL-529-NBZ-SB-0.0-0.5

Collected: 12/5/2013 10:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.04	JB	0.0319	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.109	JBQ	0.0435	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.263	JBQ	0.0619	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.130	JBQ	0.0458	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.453	JB	0.0638	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.158	JB	0.0412	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.405	JB	0.0597	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.0681	JB	0.0453	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.214	JBQ	0.0514	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.206	JBQ	0.0329	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.207	JBQ	0.0434	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.235	JB	0.0305	MDL	5.27	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0736	JBQ	0.0530	MDL	1.05	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.115	JB	0.0675	MDL	1.05	PQL	ng/Kg	U	B
OCDF	2.09	JB	0.0559	MDL	10.5	PQL	ng/Kg	U	B

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PrepPH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-525-NBZ-SB-0.0-0.5

Collected: 12/5/2013 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
EFH (C15-C20)	2.5	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

Sample ID: SL-526-NBZ-SB-0.0-0.5

Collected: 12/5/2013 11:30:00

Analysis Type: RES

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	13	J	10	MDL	26	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-526-NBZ-SB-0.0-0.5

Collected: 12/5/2013 11:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.65	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z
4,4'-DDT	0.78	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-527-NBZ-SB-0.0-0.5

Collected: 12/5/2013 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
4,4'-DDE	1.1	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
4,4'-DDT	1.0	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
ENDOSULFAN I	0.92	J	0.25	MDL	0.93	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.98	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-528-NBZ-SB-0.0-0.5

Collected: 12/5/2013 12:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.3	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
DIELDRIN	0.52	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
ENDRIN	0.41	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.71	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.32	J	0.18	MDL	0.88	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PrepPH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-529-NBZ-SB-0.0-0.5

Collected: 12/5/2013 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
4,4'-DDE	1.6	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
4,4'-DDT	0.91	J	0.38	MDL	1.8	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.36	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

**Method Category:** SVOA

**Method:** 8082A

**Matrix:** AQ

Sample ID: EB1-120513

Collected: 12/5/2013 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
Aroclor 5432	0.41	U	0.083	MDL	0.41	PQL	ug/L	UJ	E
Aroclor 5442	0.41	U	0.083	MDL	0.41	PQL	ug/L	UJ	E
Aroclor 5460	0.41	U	0.091	MDL	0.41	PQL	ug/L	UJ	E

Sample ID: EB3-120513

Collected: 12/5/2013 3:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.40	U	0.080	MDL	0.40	PQL	ug/L	UJ	S
AROCLOR 1221	0.40	U	0.080	MDL	0.40	PQL	ug/L	UJ	S
AROCLOR 1232	0.40	U	0.16	MDL	0.40	PQL	ug/L	UJ	S
AROCLOR 1242	0.40	U	0.080	MDL	0.40	PQL	ug/L	UJ	S
AROCLOR 1248	0.40	U	0.080	MDL	0.40	PQL	ug/L	UJ	S
AROCLOR 1254	0.40	U	0.080	MDL	0.40	PQL	ug/L	UJ	S
AROCLOR 1260	0.40	U	0.12	MDL	0.40	PQL	ug/L	UJ	S
Aroclor 1262	0.40	U	0.16	MDL	0.40	PQL	ug/L	UJ	S
Aroclor 1268	0.40	U	0.13	MDL	0.40	PQL	ug/L	UJ	S
Aroclor 5432	0.40	U	0.080	MDL	0.40	PQL	ug/L	UJ	S, E
Aroclor 5442	0.40	U	0.080	MDL	0.40	PQL	ug/L	UJ	E, S
Aroclor 5460	0.40	U	0.088	MDL	0.40	PQL	ug/L	UJ	S, E

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PrepPH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8151A

**Matrix:** SO

Sample ID: SL-525-NBZ-SB-0.0-0.5

Collected: 12/5/2013 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
2,4,5-TP (Silvex)	1.4	J	0.76	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-526-NBZ-SB-0.0-0.5

Collected: 12/5/2013 11:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	24		6.3	MDL	17	PQL	ug/Kg	J	L

Sample ID: SL-526-NBZ-SB-2.5-3.5

Collected: 12/5/2013 12:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	22		6.3	MDL	17	PQL	ug/Kg	J	L

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** AQ

Sample ID: EB1-120513

Collected: 12/5/2013 2:30:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHthalate	0.11	J	0.053	MDL	1.1	PQL	ug/L	UJ	L, E, B
Diethylphthalate	0.50	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.21	J	0.053	MDL	1.1	PQL	ug/L	U	B

Sample ID: EB2-120513

Collected: 12/5/2013 3:00:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHthalate	0.095	J	0.052	MDL	1.0	PQL	ug/L	UJ	L, E, B
Diethylphthalate	0.50	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.20	J	0.052	MDL	1.0	PQL	ug/L	U	B

Sample ID: EB3-120513

Collected: 12/5/2013 3:30:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHthalate	0.063	J	0.050	MDL	1.0	PQL	ug/L	UJ	L, E, B
Diethylphthalate	0.51	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.20	J	0.050	MDL	1.0	PQL	ug/L	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PrepPH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** AQ

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-527-NBZ-SB-0.0-0.5

Collected: 12/5/2013 10:45:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	4.7	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	4.2	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	64	J	33	MDL	100	PQL	ug/Kg	J	Z
CHRYSENE	5.6	J	1.9	MDL	9.3	PQL	ug/Kg	J	Z
FLUORANTHENE	6.9	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z
PYRENE	6.0	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z

Sample ID: SL-528-NBZ-SB-0.0-0.5

Collected: 12/5/2013 12:05:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.82	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.71	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.86	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.92	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-529-NBZ-SB-0.0-0.5

Collected: 12/5/2013 10:45:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-529-NBZ-SB-0.0-0.5

Collected: 12/5/2013 10:45:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PrepPH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

### **Reason Code Legend**

<b><i>Reason Code</i></b>	<b><i>Description</i></b>
B	Method Blank Contamination
E	Laboratory Control Precision
L	Laboratory Control Precision
L	Laboratory Control Spike Upper Estimation
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

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH140



# Method Blank Outlier Report

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3500B371940	12/17/2013 7:40:00 PM	1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.319 pg/L 0.418 pg/L 0.377 pg/L 0.473 pg/L 0.467 pg/L 0.680 pg/L 1.85 pg/L 1.61 pg/L	EB1-120513 EB2-120513 EB3-120513

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-120513(RES)	1,2,3,4,6,7,8-HPCDF	0.815 pg/L	0.815U pg/L
EB1-120513(RES)	1,2,3,4,7,8,9-HPCDF	0.583 pg/L	0.583U pg/L
EB1-120513(RES)	1,2,3,6,7,8-HXCDF	0.488 pg/L	0.488U pg/L
EB1-120513(RES)	OCDD	1.48 pg/L	1.48U pg/L
EB2-120513(RES)	2,3,4,7,8-PECDF	0.627 pg/L	0.627U pg/L
EB2-120513(RES)	OCDD	1.88 pg/L	1.88U pg/L
EB3-120513(RES)	1,2,3,4,6,7,8-HPCDF	0.380 pg/L	0.380U pg/L
EB3-120513(RES)	1,2,3,4,7,8,9-HPCDF	0.446 pg/L	0.446U pg/L
EB3-120513(RES)	1,2,3,6,7,8-HXCDF	0.118 pg/L	0.118U pg/L
EB3-120513(RES)	1,2,3,7,8,9-HXCDD	0.353 pg/L	0.353U pg/L
EB3-120513(RES)	2,3,4,7,8-PECDF	0.244 pg/L	0.244U pg/L
EB3-120513(RES)	OCDD	1.64 pg/L	1.64U pg/L
EB3-120513(RES)	OCDF	1.02 pg/L	1.02U pg/L

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3470B371822	12/16/2013 6:22:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	0.255 ng/Kg 0.219 ng/Kg 0.237 ng/Kg 0.164 ng/Kg 0.187 ng/Kg 0.174 ng/Kg 0.183 ng/Kg 0.220 ng/Kg 0.333 ng/Kg 0.186 ng/Kg 0.219 ng/Kg 0.271 ng/Kg 0.287 ng/Kg 0.0842 ng/Kg 0.0670 ng/Kg 0.606 ng/Kg 0.588 ng/Kg	SL-527-NBZ-SB-0.0-0.5 SL-528-NBZ-SB-0.0-0.5 SL-529-NBZ-SB-0.0-0.5

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

2/24/2014 2:02:11 PM

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following 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-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.299 ng/Kg	0.299U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.531 ng/Kg	0.531U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.353 ng/Kg	0.353U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.414 ng/Kg	0.414U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	1.05 ng/Kg	1.05U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.138 ng/Kg	0.138U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.709 ng/Kg	0.709U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.352 ng/Kg	0.352U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.321 ng/Kg	0.321U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.468 ng/Kg	0.468U ng/Kg
SL-527-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.115 ng/Kg	0.115U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.479 ng/Kg	0.479U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0499 ng/Kg	0.0499U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0766 ng/Kg	0.0766U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0904 ng/Kg	0.0904U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.128 ng/Kg	0.128U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0527 ng/Kg	0.0527U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.135 ng/Kg	0.135U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.123 ng/Kg	0.123U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0794 ng/Kg	0.0794U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0951 ng/Kg	0.0951U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0939 ng/Kg	0.0939U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0850 ng/Kg	0.0850U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.114 ng/Kg	0.114U ng/Kg
SL-528-NBZ-SB-0.0-0.5(RES)	OCDF	1.11 ng/Kg	1.11U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.04 ng/Kg	1.04U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.109 ng/Kg	0.109U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.263 ng/Kg	0.263U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.130 ng/Kg	0.130U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.453 ng/Kg	0.453U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.158 ng/Kg	0.158U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.405 ng/Kg	0.405U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0681 ng/Kg	0.0681U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.214 ng/Kg	0.214U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.206 ng/Kg	0.206U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.207 ng/Kg	0.207U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.235 ng/Kg	0.235U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0736 ng/Kg	0.0736U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.115 ng/Kg	0.115U ng/Kg
SL-529-NBZ-SB-0.0-0.5(RES)	OCDF	2.09 ng/Kg	2.09U ng/Kg

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 6010C

**Matrix:** AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34335BB220318	12/11/2013 3:18:00 AM	ZINC	0.0040 mg/L	EB2-120513 EB3-120513

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB2-120513(RES)	ZINC	0.0048 mg/L	0.0048U mg/L
EB3-120513(RES)	ZINC	0.0062 mg/L	0.0062U mg/L

**Method:** 8151A

**Matrix:** AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P45457AB240921A	12/16/2013 9:21:00 AM	DINOSEB	0.68 ug/L	EB2-120513 EB3-120513

**Method:** 8270D SIM

**Matrix:** AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWL34B261532	12/26/2013 3:32:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	0.059 ug/L 0.057 ug/L	EB1-120513 EB2-120513 EB3-120513

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-120513(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.11 ug/L	1.1U ug/L
EB1-120513(RES)	Di-n-butylphthalate	0.21 ug/L	1.1U ug/L
EB2-120513(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.095 ug/L	1.0U ug/L
EB2-120513(RES)	Di-n-butylphthalate	0.20 ug/L	1.0U ug/L
EB3-120513(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.063 ug/L	1.0U ug/L
EB3-120513(RES)	Di-n-butylphthalate	0.20 ug/L	1.0U ug/L



# Surrogate Outlier Report

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8082A

Matrix: AQ

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
EB3-120513	DECACHLOROBIPHENYL	44	45.00-120.00	All Target Analytes	J (all detects) UJ (all non-detects)



# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8151A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-525-NBZ-SB-4.0-5.0MSD (SL-525-NBZ-SB-4.0-5.0)	2,4,5-T 2,4-D	- -	177 151	12.00-172.00 42.00-143.00	- -	2,4,5-T 2,4-D	J (all detects)

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-525-NBZ-SB-4.0-5.0MS (SL-525-NBZ-SB-4.0-5.0)	EFH (C8-C11)	131	-	49.00-123.00	-	EFH (C8-C11)	J(all detects)



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method: 8082A**

**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P33457AY241026A (EB1 -120513 EB3 -120513)	Aroclor 5442	-	-	35.00-84.00	40 (30.00)	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects) UJ (all non-detects)

**Method: 8151A**

**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P33457AQ241042A P33457AY241109A (EB2 -120513 EB3 -120513)	2,4,5-T 2,4,5-TP (Silvex) 2,4-D 2,4-DB DALAPON DICHLOROPROP DINOSEB	192 189 221 205 124 215 235	191 200 223 208 - 217 288	71.00-174.00 58.00-155.00 68.00-155.00 50.00-163.00 25.00-119.00 89.00-162.00 16.00-163.00	- - - - - - -	2,4,5-T 2,4,5-TP (Silvex) 2,4-D 2,4-DB DALAPON DICHLOROPROP DINOSEB	J(all detects)

**Method: 8270D SIM**

**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P4WLLCSY261627 (EB1 -120513 EB2 -120513 EB3 -120513)	2-METHYLNAPHTHALENE NAPHTHALENE	- -	139 131	81.00-124.00 75.00-120.00	- -	2-METHYLNAPHTHALENE NAPHTHALENE	J(all detects)
P4WLLCSY261627 (EB1 -120513 EB2 -120513 EB3 -120513)	BIS(2-ETHYLHEXYL)PHTHALAT	-	365	70.00-143.00	110 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects) UJ(all non-detects)

**Method: 8151A**

**Matrix: SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P33454AQ242143A (SL -525-NBZ-SB-0.0-0.5 SL -525-NBZ-SB-4.0-5.0 SL -526-NBZ-SB-0.0-0.5 SL -526-NBZ-SB-2.5-3.5 SL -825-NBZ-SB-4.0-5.0)	2,4-D 2,4-DB	136 135	- -	59.00-122.00 54.00-131.00	- -	2,4-D 2,4-DB	J(all detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 1613B

**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-120513	1,2,3,4,6,7,8-HPCDF	JBQ	0.815	9.91	PQL	pg/L	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.583	9.91	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.488	9.91	PQL	pg/L	
	1,2,3,7,8-PECDF	JQ	0.646	9.91	PQL	pg/L	
	OCDD	JB	1.48	19.8	PQL	pg/L	
EB2-120513	2,3,4,7,8-PECDF	JBQ	0.627	9.74	PQL	pg/L	J (all detects)
	OCDD	JBQ	1.88	19.5	PQL	pg/L	
EB3-120513	1,2,3,4,6,7,8-HPCDD	JQ	0.436	9.80	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.380	9.80	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.446	9.80	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JQ	0.225	9.80	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.118	9.80	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.353	9.80	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	J	0.390	9.80	PQL	pg/L	
	1,2,3,7,8-PECDD	JQ	0.635	9.80	PQL	pg/L	
	1,2,3,7,8-PECDF	JQ	0.499	9.80	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.244	9.80	PQL	pg/L	
	OCDD	JBQ	1.64	19.6	PQL	pg/L	
	OCDF	JBQ	1.02	19.6	PQL	pg/L	

**Method:** 6010C

**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB2-120513	ZINC	J	0.0048	0.0400	PQL	mg/L	J (all detects)
EB3-120513	ZINC	J	0.0062	0.0400	PQL	mg/L	J (all detects)

**Method:** 8270D SIM

**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-120513	BIS(2-ETHYLHEXYL)PHthalate	J	0.11	1.1	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.50	1.1	PQL	ug/L	
	Di-n-butylphthalate	J	0.21	1.1	PQL	ug/L	
EB2-120513	BIS(2-ETHYLHEXYL)PHthalate	J	0.095	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.50	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.20	1.0	PQL	ug/L	
EB3-120513	BIS(2-ETHYLHEXYL)PHthalate	J	0.063	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.51	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.20	1.0	PQL	ug/L	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 1613B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-527-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.33	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.299	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.531	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.353	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	1.27	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.414	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	1.05	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.138	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.709	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.352	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.321	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.468	5.61	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.115	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.347	1.12	PQL	ng/Kg	
	OCDF	JB	5.93	11.2	PQL	ng/Kg	
SL-528-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.55	5.04	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.479	5.04	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0499	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0766	5.04	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0904	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.128	5.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0527	5.04	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.135	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.123	5.04	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0794	5.04	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0951	5.04	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0939	5.04	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0850	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.114	1.01	PQL	ng/Kg	
	OCDF	JB	1.11	10.1	PQL	ng/Kg	
SL-529-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.04	5.27	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.109	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.263	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.130	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.453	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.158	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.405	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0681	5.27	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.214	5.27	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.206	5.27	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.207	5.27	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.235	5.27	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0736	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.115	1.05	PQL	ng/Kg	
	OCDF	JB	2.09	10.5	PQL	ng/Kg	

**Method:** 8015M

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.5	5.1	PQL	mg/Kg	J (all detects)
SL-526-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	13	26	PQL	mg/Kg	J (all detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH140

Laboratory: LL

EDD Filename: PH140

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 8081B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-526-NBZ-SB-0.0-0.5	4,4'-DDE	J	0.65	1.8	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.78	1.8	PQL	ug/Kg	
SL-527-NBZ-SB-0.0-0.5	4,4'-DDE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	1.0	1.9	PQL	ug/Kg	
	ENDOSULFAN I	J	0.92	0.93	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.98	1.9	PQL	ug/Kg	
SL-528-NBZ-SB-0.0-0.5	4,4'-DDT	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.52	1.8	PQL	ug/Kg	
	ENDRIN	J	0.41	1.8	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.71	1.8	PQL	ug/Kg	
	gamma-BHC (Lindane)	J	0.32	0.88	PQL	ug/Kg	
SL-529-NBZ-SB-0.0-0.5	4,4'-DDE	J	1.6	1.8	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.91	1.8	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.36	1.8	PQL	ug/Kg	

**Method:** 8151A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-525-NBZ-SB-0.0-0.5	2,4,5-TP (Silvex)	J	1.4	1.7	PQL	ug/Kg	J (all detects)

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-527-NBZ-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	4.7	9.3	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	4.2	9.3	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	64	100	PQL	ug/Kg	
	CHRYSENE	J	5.6	9.3	PQL	ug/Kg	
	FLUORANTHENE	J	6.9	9.3	PQL	ug/Kg	
	PYRENE	J	6.0	9.3	PQL	ug/Kg	
SL-528-NBZ-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.82	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.6	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.71	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.86	1.7	PQL	ug/Kg	
	PYRENE	J	0.92	1.7	PQL	ug/Kg	
SL-529-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	PYRENE	J	1.4	1.8	PQL	ug/Kg	



LDC #: 31254B4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH140

ADR

Laboratory: Eurofins Lancaster Laboratories

Date: 2/5/14

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

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: 12/5/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	N	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	ICP Serial Dilution	N	
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	N	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	—	EB=1,2

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples:

WS-1

1	EB2-120513	11		21		31	
2	EB3-120513	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: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH143**

Prepared for

**CDM Smith**  
555 17th Street, Suite 1100  
Denver, CO 80202

Prepared by

**Laboratory Data Consultants, Inc.**  
2701 Loker Ave West, Suite 220  
Carlsbad, California 92010

February 27, 2014



## **INTRODUCTION**

This Data Validation Report (DVR) presents Level III data validation results for samples collected on December 10, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) 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 (CLPNFGs) for Superfund Organic Methods Data Review (June 2008). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Polychlorinated Biphenyls (PCBs) by EPA SW 846 Method 8082A

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, surrogates, laboratory control sample/laboratory control sample duplicates (LCS/LCSD), method blanks, equipment blanks and field blanks. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013). Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

Initial Calibration data were not reviewed for level III.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for level III.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks.

## **V. Surrogate Spikes**

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

## **VI. Matrix Spike/Matrix Spike Duplicates**

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

## **VII. Laboratory Duplicates Sample**

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

## **VIII. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## **IX. Internal Standards**

Internal standards were not reviewed for level III.

## **X. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.



All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH143	All compounds reported as detected below the RL.	J (all detects)	A

### **XI. Field Duplicate Samples**

No field duplicates were identified in this SDG.

### **XII. Field Blank Samples**

No trip blanks were identified in this SDG.

One equipment blank (from SDG PH146) was collected and analyzed for PCBs. No PCBs were detected in the equipment blank.

One field blank (from SDG PH032) was collected and analyzed for PCBs. No PCBs were detected in the field blank.

### **XIII. Overall Assessment of Data**

No data associated with this sampling event were rejected. The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels. All data are deemed useable for the intended use.



**Attachment 1**  
**Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Dec-2013	SL-555-NBZ-SB-0.0-0.5	7308299	N	3546	8082A	III
10-Dec-2013	SL-554-NBZ-SB-0.0-0.5	7308298	N	3546	8082A	III
10-Dec-2013	SL-553-NBZ-SB-0.0-0.5	7308297	N	3546	8082A	III



**Attachment 2**  
**Overall Data Qualification Summary**



## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH143

Laboratory: LL

EDD Filename: PH143

eQAPP Name: CDM\_SSFL\_140113\_Lan

**No Data Review Qualifiers Applied.**



**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH143

(No Outliers)



**Data Validation Report**  
**Santa Susana Field Laboratory**

**Subarea NBZ**

**SDG: PH146**

Prepared for

**CDM Smith**  
555 17th Street, Suite 1100  
Denver, CO 80202

Prepared by

**Laboratory Data Consultants, Inc.**  
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Carlsbad, California 92010

February 27, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected on December 10, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) 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 (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)

Pesticides by EPA SW 846 Method 8081B

Polychlorinated Biphenyls (PCBs) by EPA SW 846 Method 8082A

Metals by EPA SW 846 Method 6010C, 6020A and 7470A

Herbicides by EPA SW 846 Method 8151A

Total Petroleum Hydrocarbons (TPH) as Gasoline by EPA SW 846 Method 8015M

TPH as Extractables by EPA SW 846 Method 8015M

Dioxins and Dibenzofurans by EPA Method 1613B

Wet Chemistry:

Nitrate as Nitrogen by EPA Method 300.0

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards (dioxins only), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), method blanks, equipment blanks and field blanks. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of ICB/CCBs, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

Initial Calibration data were not reviewed for level III.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for level III.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of two blanks for SVOCs and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

## **V. Surrogate Spikes**

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

## **VI. ICP Interference Check Sample (ICS) Analysis**

ICP interference check data were not reviewed for level III.

## **VII. Matrix Spike/Matrix Spike Duplicates**

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

## **VIII. Laboratory Duplicates Sample**

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

## **IX. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of several LCS/LCSD pairs for pesticides and herbicides. The associated sample results were qualified as non-detected estimated (UJ). The details regarding the qualification of data are provided in Enclosure I.



## **X. Internal Standards**

Internal standards were reviewed for dioxins. Percent recoveries (%R) were within QC limits.

## **XI. ICP Serial Dilution**

ICP serial dilution was not performed for this SDG.

## **XII. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH146	All compounds reported as detected below the RL.	J (all detects)	A

## **XIII. Field Duplicate Samples**

No field duplicates were identified in this SDG.

## **XIV. Field Blank Samples**

No trip blanks were identified in this SDG.

Two equipment blanks were collected and analyzed for SVOCs, pesticides, PCBs, metals, herbicides, TPH as gasoline, TPH as extractables, dioxins and nitrate as nitrogen. The equipment blanks had detections for SVOCs, metals and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the equipment blanks, therefore no data were qualified.

One field blank (from SDG PH032) was collected and analyzed for SVOCs. The field blank had detections for SVOCs. The sample results were not detected or were significantly greater than the concentrations found in the field blank, therefore no data were qualified.

## **XV. Overall Assessment of Data**

The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. The remainder of the data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



## **Attachment 1**

### **Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Dec-2013	EB1-121113	7310858	EB	3005A	6010C	III
11-Dec-2013	EB1-121113	7310858	EB	3510C	8015M	III
11-Dec-2013	EB1-121113	7310858	EB	3510C	8081B	III
11-Dec-2013	EB1-121113	7310858	EB	3510C	8270D SIM	III
11-Dec-2013	EB1-121113	7310858	EB	5030B	8015M	III
11-Dec-2013	EB1-121113	7310858	EB	M3010A	6020A	III
11-Dec-2013	EB1-121113	7310858	EB	METHOD	1613B	III
11-Dec-2013	EB1-121113	7310858	EB	METHOD	7470A	III
11-Dec-2013	SL-552-NBZ-SB-0.0-0.5	7310856	N	3546	8270D SIM	III
11-Dec-2013	EB2-121113	7310859	EB	3005A	6010C	III
11-Dec-2013	EB2-121113	7310859	EB	3510C	8015M	III
11-Dec-2013	EB2-121113	7310859	EB	3510C	8081B	III
11-Dec-2013	EB2-121113	7310859	EB	3510C	8082A	III
11-Dec-2013	EB2-121113	7310859	EB	3510C	8270D SIM	III
11-Dec-2013	EB2-121113	7310859	EB	5030B	8015M	III
11-Dec-2013	EB2-121113	7310859	EB	Gen Prep	300.0	III
11-Dec-2013	EB2-121113	7310859	EB	M3010A	6020A	III
11-Dec-2013	EB2-121113	7310859	EB	METHOD	1613B	III
11-Dec-2013	EB2-121113	7310859	EB	METHOD	7470A	III
11-Dec-2013	EB2-121113	7310859	EB	METHOD	8151A	III
11-Dec-2013	SL-552-NBZ-SB-2.0-3.0	7310857	N	3546	8270D SIM	III



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH146

Laboratory: LL

EDD Filename: PH146

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** AQ

Sample ID: EB2-121113

Collected: 12/11/2013 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
ZINC	0.0030	J	0.0020	MDL	0.0400	PQL	mg/L	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** AQ

Sample ID: EB1-121113

Collected: 12/11/2013 2:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.464	JBQ	0.260	MDL	9.65	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.623	JBQ	0.132	MDL	9.65	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.651	JBQ	0.159	MDL	9.65	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.289	J	0.237	MDL	9.65	PQL	pg/L	J	Z
1,2,3,4,7,8-HxCDF	0.255	JBQ	0.178	MDL	9.65	PQL	pg/L	U	B
1,2,3,6,7,8-HxCDF	0.189	JBQ	0.184	MDL	9.65	PQL	pg/L	U	B
1,2,3,7,8,9-HxCDF	0.258	JQ	0.233	MDL	9.65	PQL	pg/L	J	Z
1,2,3,7,8-PECDD	0.460	JQ	0.418	MDL	9.65	PQL	pg/L	J	Z
1,2,3,7,8-PECDF	0.447	JBQ	0.287	MDL	9.65	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.658	JQ	0.278	MDL	9.65	PQL	pg/L	J	Z
2,3,7,8-TCDF	0.622	JQ	0.383	MDL	1.93	PQL	pg/L	J	Z
OCDD	1.60	JBQ	0.336	MDL	19.3	PQL	pg/L	U	B
OCDF	0.666	JBQ	0.391	MDL	19.3	PQL	pg/L	U	B

Sample ID: EB2-121113

Collected: 12/11/2013 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	0.464	JBQ	0.240	MDL	9.54	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.338	JBQ	0.0932	MDL	9.54	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.230	JB	0.113	MDL	9.54	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDF	0.432	JBQ	0.155	MDL	9.54	PQL	pg/L	U	B
1,2,3,6,7,8-HxCDD	0.285	JQ	0.224	MDL	9.54	PQL	pg/L	J	Z
1,2,3,6,7,8-HxCDF	0.318	JBQ	0.161	MDL	9.54	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.343	JBQ	0.228	MDL	9.54	PQL	pg/L	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

2/25/2014 7:29:40 AM

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## Data Qualifier Summary

Lab Reporting Batch ID: PH146

Laboratory: LL

EDD Filename: PH146

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** AQ

Sample ID: EB2-121113

Collected: 12/11/2013 2:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.258	JQ	0.214	MDL	9.54	PQL	pg/L	J	Z
OCDD	1.09	JBQ	0.276	MDL	19.1	PQL	pg/L	U	B
OCDF	0.604	JBQ	0.316	MDL	19.1	PQL	pg/L	U	B

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** AQ

Sample ID: EB1-121113

Collected: 12/11/2013 2:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN	0.018	U	0.0073	MDL	0.018	PQL	ug/L	UJ	E

Sample ID: EB2-121113

Collected: 12/11/2013 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
ENDRIN	0.016	U	0.0067	MDL	0.016	PQL	ug/L	UJ	E

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** AQ

Sample ID: EB1-121113

Collected: 12/11/2013 2:00:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	0.15	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.13	J	0.050	MDL	1.0	PQL	ug/L	J	Z

Sample ID: EB2-121113

Collected: 12/11/2013 2:30:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.42	J	0.051	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.16	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.13	J	0.051	MDL	1.0	PQL	ug/L	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH146

Laboratory: LL

EDD Filename: PH146

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** AQ

Sample ID: EB2-121113

Collected: 12/11/2013 2:30:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	0.012	J	0.010	MDL	0.051	PQL	ug/L	J	Z
PYRENE	0.049	J	0.010	MDL	0.051	PQL	ug/L	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-552-NBZ-SB-0.0-0.5

Collected: 12/11/2013 2:15:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	6.8	J	6.8	MDL	17	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	74	J	61	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	8.2	J	3.4	MDL	17	PQL	ug/Kg	J	Z
PHENANTHRENE	8.2	J	6.8	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-552-NBZ-SB-2.0-3.0

Collected: 12/11/2013 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	0.88	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.76	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	0.96	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	16	J	6.1	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.75	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.75	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.73	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH146

Laboratory: LL

EDD Filename: PH146

eQAPP Name: CDM\_SSFL\_140113\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
B	Method Blank Contamination
E	Laboratory Control Precision
L	Laboratory Control Precision
L	Laboratory Control Spike Upper Estimation
S	Surrogate/Tracer Recovery Lower Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH146



# Method Blank Outlier Report

Lab Reporting Batch ID: PH146

Laboratory: LL

EDD Filename: PH146

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B  
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3530B371711	12/21/2013 5:11:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDF 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF OCDD OCDF	0.375 pg/L 0.579 pg/L 0.410 pg/L 0.270 pg/L 0.304 pg/L 0.905 pg/L 0.347 pg/L 1.46 pg/L 1.19 pg/L	EB1-121113 EB2-121113

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB1-121113(RES)	1,2,3,4,6,7,8-HPCDD	0.464 pg/L	0.464U pg/L
EB1-121113(RES)	1,2,3,4,6,7,8-HPCDF	0.623 pg/L	0.623U pg/L
EB1-121113(RES)	1,2,3,4,7,8,9-HPCDF	0.651 pg/L	0.651U pg/L
EB1-121113(RES)	1,2,3,4,7,8-HXCDF	0.255 pg/L	0.255U pg/L
EB1-121113(RES)	1,2,3,6,7,8-HXCDF	0.189 pg/L	0.189U pg/L
EB1-121113(RES)	1,2,3,7,8-PECDF	0.447 pg/L	0.447U pg/L
EB1-121113(RES)	OCDD	1.60 pg/L	1.60U pg/L
EB1-121113(RES)	OCDF	0.666 pg/L	0.666U pg/L
EB2-121113(RES)	1,2,3,4,6,7,8-HPCDD	0.464 pg/L	0.464U pg/L
EB2-121113(RES)	1,2,3,4,6,7,8-HPCDF	0.338 pg/L	0.338U pg/L
EB2-121113(RES)	1,2,3,4,7,8,9-HPCDF	0.230 pg/L	0.230U pg/L
EB2-121113(RES)	1,2,3,4,7,8-HXCDF	0.432 pg/L	0.432U pg/L
EB2-121113(RES)	1,2,3,6,7,8-HXCDF	0.318 pg/L	0.318U pg/L
EB2-121113(RES)	1,2,3,7,8-PECDF	0.343 pg/L	0.343U pg/L
EB2-121113(RES)	OCDD	1.09 pg/L	1.09U pg/L
EB2-121113(RES)	OCDF	0.604 pg/L	0.604U pg/L

Method: 8270D SIM  
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWG34B261511	12/19/2013 3:11:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	0.077 ug/L	EB1-121113 EB2-121113

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB2-121113(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.42 ug/L	1.0U ug/L



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH146

Laboratory: LL

EDD Filename: PH146

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method: 8151A**

**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P33513AQ241656A P33513AY241723A (EB2-121113)	DINOSEB	216	223	16.00-163.00	-	DINOSEB	J (all detects)

**Method: 8081B**

**Matrix: AQ**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P33511AQ241730A (EB1-121113 EB2-121113)	ENDRIN KETONE	140	-	51.00-133.00	-	ENDRIN KETONE	J(all detects)
P33511AY241745A (EB1-121113 EB2-121113)	ENDRIN	-	-	43.00-139.00	71 (30.00)	ENDRIN	J(all detects) UJ(all non-detects)



# Reporting Limit Outliers

Lab Reporting Batch ID: PH146

Laboratory: LL

EDD Filename: PH146

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-121113	1,2,3,4,6,7,8-HPCDD	JBQ	0.464	9.65	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.623	9.65	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.651	9.65	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	J	0.289	9.65	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.255	9.65	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.189	9.65	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JQ	0.258	9.65	PQL	pg/L	
	1,2,3,7,8-PECDD	JQ	0.460	9.65	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.447	9.65	PQL	pg/L	
	2,3,4,7,8-PECDF	JQ	0.658	9.65	PQL	pg/L	
	2,3,7,8-TCDF	JQ	0.622	1.93	PQL	pg/L	
	OCDD	JBQ	1.60	19.3	PQL	pg/L	
	OCDF	JBQ	0.666	19.3	PQL	pg/L	
EB2-121113	1,2,3,4,6,7,8-HPCDD	JBQ	0.464	9.54	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.338	9.54	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.230	9.54	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.432	9.54	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JQ	0.285	9.54	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.318	9.54	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.343	9.54	PQL	pg/L	
	2,3,4,7,8-PECDF	JQ	0.258	9.54	PQL	pg/L	
	OCDD	JBQ	1.09	19.1	PQL	pg/L	
	OCDF	JBQ	0.604	19.1	PQL	pg/L	

Method: 6010C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB2-121113	ZINC	J	0.0030	0.0400	PQL	mg/L	J (all detects)

Method: 8270D SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB1-121113	Diethylphthalate	J	0.15	1.0	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.13	1.0	PQL	ug/L	
EB2-121113	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.42	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.16	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.13	1.0	PQL	ug/L	
	FLUORANTHENE	J	0.012	0.051	PQL	ug/L	
	PYRENE	J	0.049	0.051	PQL	ug/L	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH146

Laboratory: LL

EDD Filename: PH146

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-552-NBZ-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	6.8	17	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	74	180	PQL	ug/Kg	
	CHRYSENE	J	8.2	17	PQL	ug/Kg	
	PHENANTHRENE	J	8.2	17	PQL	ug/Kg	
SL-552-NBZ-SB-2.0-3.0	2-METHYLNAPHTHALENE	J	0.88	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.76	1.7	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	0.96	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	18	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.75	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.75	1.7	PQL	ug/Kg	
	PYRENE	J	0.73	1.7	PQL	ug/Kg	



LDC #: 31254D4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH146

ADR

Laboratory: Eurofins Lancaster Laboratories

Date: 3/5/14

Page: 1 of 1

Reviewer: al2nd Reviewer: SN**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: 12/11/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	✓	
VI.	Matrix Spike Analysis	N	
VII.	Duplicate Sample Analysis	N	
VIII.	Laboratory Control Samples (LCS)	N	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	ICP Serial Dilution	N	
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	N	
XIII.	Field Duplicates		
XIV.	Field Blanks	ND	EB = 1, 2

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples:

water

1	EB2-121113	11		21		31	
2	EB1-121113	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: \_\_\_\_\_



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH148**

Prepared for

**CDM Smith**  
555 17th Street, Suite 1100  
Denver, CO 80202

Prepared by

**Laboratory Data Consultants, Inc.**  
2701 Loker Ave West, Suite 220  
Carlsbad, California 92010

February 27, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected on December 11 through December 12, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4), a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)

Pesticides by EPA SW 846 Method 8081B

Metals by EPA SW 846 Method 6010C, 6020A and 7471B

Herbicides by EPA SW 846 Method 8151A

Total Petroleum Hydrocarbons (TPH) as Extractables by EPA SW 846 Method 8015M

Dioxins and Dibenzofurans by EPA Method 1613B

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards (dioxins only), matrix spike/matrix spike duplicates (MS/MSD), laboratory duplicates (DUP), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), ICP serial dilutions, method blanks, equipment blanks, field blanks, and field duplicate samples. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of ICB/CCBs and ICP serial dilutions, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

Initial Calibration data were not reviewed for level III.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for level III.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of several blanks for metals and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

## **V. Surrogate Spikes**

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

## **VI. ICP Interference Check Sample (ICS) Analysis**

ICP interference check data were not reviewed for level III.

## **VII. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed at the required frequency. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of two MS/MSD pairs for SVOCs, metals, herbicides and TPH as extractables. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The details regarding the qualification of data are provided in Enclosure I.

## **VIII. Laboratory Duplicates Sample**

Laboratory duplicates (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## **IX. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.



## **X. Internal Standards**

Internal standards were reviewed for dioxins. Percent recoveries (%R) were within QC limits.

## **XI. ICP Serial Dilution**

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

## **XII. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH148	All compounds reported as detected below the RL.	J (all detects)	A

## **XIII. Field Duplicate Samples**

Two field duplicate pairs were collected and analyzed for SVOCs, pesticides, metals, herbicides, TPH as extractables and dioxins. All RPDs were within QC limits with the exception of several SVOCs, pesticides, metals, herbicides, TPH as extractables and dioxins. The associated sample results were qualified as detected estimated (J) or non-detected estimated (UJ) as applicable. The field duplicate result comparisons are provided in Enclosure I.

## **XIV. Field Blank Samples**

No trip blanks were identified in this SDG.

One equipment blank (from SDG PH146) was collected and analyzed for SVOCs, pesticides, metals, herbicides, TPH as extractables and dioxins. The equipment blanks had detections for SVOCs, metals and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the equipment blanks, therefore no data were qualified.

One field blank (from SDG PH032) was collected and analyzed for SVOCs, pesticides, metals, herbicides, TPH as extractables and dioxins. The field blank had detections for SVOCs, metals and dioxins. The associated sample results were qualified as non-detected (U) due to field blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the field blank were not qualified. The field blank outlier reports are presented in Enclosure I.



## **XV. Overall Assessment of Data**

The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. The remainder of the data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



## **Attachment 1**

### **Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Dec-2013	SL-542-NBZ-SB-0.0-0.5	7312459	N	3546	8081B	III
11-Dec-2013	SL-542-NBZ-SB-0.0-0.5	7312459	N	3546	8270D SIM	III
11-Dec-2013	SL-542-NBZ-SB-0.0-0.5	7312459	N	3550B	8151A	III
11-Dec-2013	SL-542-NBZ-SB-0.0-0.5	7312459	N	METHOD	1613B	III
11-Dec-2013	SL-541-NBZ-SB-0.0-0.5	7312458	N	3546	8081B	III
11-Dec-2013	SL-541-NBZ-SB-0.0-0.5	7312458	N	3546	8270D SIM	III
11-Dec-2013	SL-541-NBZ-SB-0.0-0.5	7312458	N	3550B	8151A	III
11-Dec-2013	SL-541-NBZ-SB-0.0-0.5	7312458	N	METHOD	1613B	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5	7312454	N	3546	8081B	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5	7312454	N	3546	8270D SIM	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5	7312454	N	3550B	8151A	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5	7312454	N	METHOD	1613B	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5MS	7312455	MS	3546	8081B	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5MS	7312455	MS	3546	8270D SIM	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5MS	7312455	MS	3550B	8151A	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5MS	7312455	MS	METHOD	1613B	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5MSD	7312456	MSD	3546	8081B	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5MSD	7312456	MSD	3546	8270D SIM	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5MSD	7312456	MSD	3550B	8151A	III
11-Dec-2013	SL-540-NBZ-SB-0.0-0.5MSD	7312456	MSD	METHOD	1613B	III
11-Dec-2013	SL-840-NBZ-SB-0.0-0.5	7312457	FD	3546	8081B	III
11-Dec-2013	SL-840-NBZ-SB-0.0-0.5	7312457	FD	3546	8270D SIM	III
11-Dec-2013	SL-840-NBZ-SB-0.0-0.5	7312457	FD	3550B	8151A	III
11-Dec-2013	SL-840-NBZ-SB-0.0-0.5	7312457	FD	METHOD	1613B	III
12-Dec-2013	SL-539-NBZ-SB-0.0-0.5	7312460	N	3546	8015M	III
12-Dec-2013	SL-539-NBZ-SB-0.0-0.5	7312460	N	3546	8081B	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Dec-2013	SL-539-NBZ-SB-0.0-0.5	7312460	N	3546	8270D SIM	III
12-Dec-2013	SL-539-NBZ-SB-0.0-0.5	7312460	N	METHOD	1613B	III
12-Dec-2013	SL-543-NBZ-SB-0.0-0.5	7312461	N	3546	8015M	III
12-Dec-2013	SL-543-NBZ-SB-0.0-0.5	7312461	N	3546	8270D SIM	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5	7312462	N	3050B	6010C	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5	7312462	N	3050B	6020A	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5	7312462	N	3546	8015M	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5	7312462	N	3546	8081B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5	7312462	N	3546	8270D SIM	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5	7312462	N	METHOD	1613B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5	7312462	N	METHOD	7471B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MS	7312463	MS	3050B	6010C	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MS	7312463	MS	3050B	6020A	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MS	7312463	MS	3546	8015M	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MS	7312463	MS	3546	8081B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MS	7312463	MS	3546	8270D SIM	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MS	7312463	MS	METHOD	1613B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MS	7312463	MS	METHOD	7471B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MSD	7312464	MSD	3050B	6010C	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MSD	7312464	MSD	3050B	6020A	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MSD	7312464	MSD	3546	8015M	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MSD	7312464	MSD	3546	8081B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MSD	7312464	MSD	3546	8270D SIM	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MSD	7312464	MSD	METHOD	1613B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5MSD	7312464	MSD	METHOD	7471B	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5DUP	7312465	DUP	3050B	6010C	III



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5DUP	7312465	DUP	3050B	6020A	III
12-Dec-2013	SL-544-NBZ-SB-0.0-0.5DUP	7312465	DUP	METHOD	7471B	III
12-Dec-2013	SL-844-NBZ-SB-0.0-0.5	7312466	FD	3050B	6010C	III
12-Dec-2013	SL-844-NBZ-SB-0.0-0.5	7312466	FD	3050B	6020A	III
12-Dec-2013	SL-844-NBZ-SB-0.0-0.5	7312466	FD	3546	8015M	III
12-Dec-2013	SL-844-NBZ-SB-0.0-0.5	7312466	FD	3546	8081B	III
12-Dec-2013	SL-844-NBZ-SB-0.0-0.5	7312466	FD	3546	8270D SIM	III
12-Dec-2013	SL-844-NBZ-SB-0.0-0.5	7312466	FD	METHOD	1613B	III
12-Dec-2013	SL-844-NBZ-SB-0.0-0.5	7312466	FD	METHOD	7471B	III



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method Category: METALS

Method: 6010C

Matrix: SO

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:20:00

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	3.99	U	0.739	MDL	3.99	PQL	mg/Kg	UJ	Q, FD
ARSENIC	2.84	J	0.699	MDL	3.99	PQL	mg/Kg	J	Z
BERYLLIUM	0.359	J	0.0669	MDL	0.998	PQL	mg/Kg	J	Z
BORON	8.30	J	0.839	MDL	9.98	PQL	mg/Kg	J	Z, FD
CADMIUM	0.464	J	0.0759	MDL	0.998	PQL	mg/Kg	J	Z, FD
COPPER	3.80		0.290	MDL	2.00	PQL	mg/Kg	J	FD
TIN	2.33	J	0.220	MDL	9.98	PQL	mg/Kg	U	B
PHOSPHORUS	385		2.89	MDL	9.98	PQL	mg/Kg	J	Q

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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
MOLYBDENUM	0.329	J	0.170	MDL	2.00	PQL	mg/Kg	U	F
SODIUM	53.9	J	16.7	MDL	99.8	PQL	mg/Kg	J	Z
Zirconium	0.877	J	0.839	MDL	4.99	PQL	mg/Kg	J	Z, FD

Sample ID: SL-844-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.22	J	0.735	MDL	3.97	PQL	mg/Kg	J	Z, Q, FD
ARSENIC	3.75	J	0.695	MDL	3.97	PQL	mg/Kg	J	Z
BERYLLIUM	0.382	J	0.0665	MDL	0.993	PQL	mg/Kg	J	Z
BORON	4.20	J	0.834	MDL	9.93	PQL	mg/Kg	J	Z, FD
CADMIUM	0.993	U	0.0754	MDL	0.993	PQL	mg/Kg	UJ	FD
COPPER	6.43		0.288	MDL	1.99	PQL	mg/Kg	J	FD
MOLYBDENUM	0.287	J	0.169	MDL	1.99	PQL	mg/Kg	U	F
PHOSPHORUS	321		2.87	MDL	9.93	PQL	mg/Kg	J	Q
SODIUM	57.6	J	16.6	MDL	99.3	PQL	mg/Kg	J	Z
TIN	2.76	J	0.218	MDL	9.93	PQL	mg/Kg	U	B
Zirconium	4.96	U	0.834	MDL	4.96	PQL	mg/Kg	UJ	FD

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:20:00

Analysis Type: REA2

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.284	J	0.0998	MDL	0.399	PQL	mg/Kg	J	Z

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:20:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0426	J	0.0260	MDL	0.200	PQL	mg/Kg	J	Z

Sample ID: SL-844-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:40:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0450	J	0.0258	MDL	0.199	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:20:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0109	J	0.0102	MDL	0.0170	PQL	mg/Kg	J	Z

Sample ID: SL-844-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0096	J	0.0095	MDL	0.0158	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-539-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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	3.90	JB	0.0404	MDL	5.17	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-539-NBZ-SB-0.0-0.5

Collected: 12/12/2013 9:30:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.01	JBQ	0.0360	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.190	JBQ	0.0493	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.151	J	0.0451	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.131	JBQ	0.0325	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.280	JBQ	0.0471	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.169	JQ	0.0297	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.297	J	0.0452	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0803	JB	0.0352	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.129	JQ	0.0494	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.200	JB	0.0369	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.185	JB	0.0299	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.430	JB	0.0339	MDL	5.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.246	JQ	0.0810	MDL	1.03	PQL	ng/Kg	J	Z
OCDF	2.03	JB	0.0448	MDL	10.3	PQL	ng/Kg	J	Z

Sample ID: SL-540-NBZ-SB-0.0-0.5

Collected: 12/11/2013 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-HPCDD	36.2	B	0.0810	MDL	5.90	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	8.53	B	0.0479	MDL	5.90	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	0.654	JB	0.0782	MDL	5.90	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.350	J	0.0895	MDL	5.90	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.337	JQ	0.0644	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	1.75	JB	0.0902	MDL	5.90	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.490	J	0.0586	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.583	JB	0.0900	MDL	5.90	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.139	JBQ	0.0751	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.222	JBQ	0.0525	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.785	JB	0.0481	MDL	5.90	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.575	JB	0.0624	MDL	5.90	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.580	JB	0.0511	MDL	5.90	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0859	JBQ	0.0607	MDL	1.18	PQL	ng/Kg	UJ	B, FD

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-540-NBZ-SB-0.0-0.5

Collected: 12/11/2013 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
2,3,7,8-TCDF	0.332	JB	0.0889	MDL	1.18	PQL	ng/Kg	U	B
OCDD	288	B	0.0691	MDL	11.8	PQL	ng/Kg	J	FD

Sample ID: SL-541-NBZ-SB-0.0-0.5

Collected: 12/11/2013 1:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.22	JB	0.0442	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.343	JQ	0.0535	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.426	JB	0.0479	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	2.78	JB	0.0587	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.419	J	0.0442	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.878	JQ	0.0538	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.207	JBQ	0.0484	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.304	JQ	0.0781	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.316	JB	0.0435	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.577	JB	0.0436	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.325	JBQ	0.0427	MDL	5.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.134	J	0.0917	MDL	1.01	PQL	ng/Kg	J	Z

Sample ID: SL-542-NBZ-SB-0.0-0.5

Collected: 12/11/2013 12:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.930	JB	0.0491	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.404	JQ	0.0473	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.366	JBQ	0.0386	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	2.03	JB	0.0521	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.382	J	0.0357	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.799	J	0.0481	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0701	JBQ	0.0577	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.151	JQ	0.0613	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.402	JB	0.0363	MDL	5.34	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.626	JB	0.0361	MDL	5.34	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-542-NBZ-SB-0.0-0.5

Collected: 12/11/2013 12:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.345	JBQ	0.0365	MDL	5.34	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.127	JQ	0.0786	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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-HPCDD	4.41	JB	0.0420	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.99	JB	0.0270	MDL	4.96	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	0.161	JB	0.0388	MDL	4.96	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.133	JQ	0.0418	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDF	0.165	JB	0.0326	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.474	JB	0.0447	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.214	JQ	0.0294	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDD	0.429	J	0.0418	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDF	0.150	JBQ	0.0342	MDL	4.96	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.126	JQ	0.0562	MDL	4.96	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.229	JB	0.0343	MDL	4.96	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.232	JB	0.0309	MDL	4.96	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.250	JB	0.0325	MDL	4.96	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.993	U	0.0937	MDL	0.993	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.126	J	0.0872	MDL	0.993	PQL	ng/Kg	J	Z
OCDF	2.24	JB	0.0456	MDL	9.93	PQL	ng/Kg	J	Z

Sample ID: SL-840-NBZ-SB-0.0-0.5

Collected: 12/11/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	90.2	B	0.120	MDL	5.80	PQL	ng/Kg	J	FD
1,2,3,4,6,7,8-HPCDF	14.5	B	0.0451	MDL	5.80	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	1.18	JBQ	0.0635	MDL	5.80	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.665	JQ	0.0681	MDL	5.80	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDF	0.501	JB	0.0529	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDD	3.07	JB	0.0701	MDL	5.80	PQL	ng/Kg	J	Z, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-840-NBZ-SB-0.0-0.5

Collected: 12/11/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.563	J	0.0509	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.18	J	0.0667	MDL	5.80	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDF	0.172	JBQ	0.0553	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.215	JQ	0.0834	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.21	JB	0.0506	MDL	5.80	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.787	JB	0.0498	MDL	5.80	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.590	JB	0.0484	MDL	5.80	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	1.16	U	0.123	MDL	1.16	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.466	J	0.102	MDL	1.16	PQL	ng/Kg	J	Z
OCDD	856	B	0.0985	MDL	11.6	PQL	ng/Kg	J	FD

Sample ID: SL-844-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.20	JB	0.0390	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.851	JB	0.0239	MDL	4.96	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8,9-HPCDF	0.272	JBQ	0.0390	MDL	4.96	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.157	JQ	0.0355	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.198	JB	0.0334	MDL	4.96	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.391	JB	0.0378	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.220	J	0.0305	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.472	JQ	0.0356	MDL	4.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.258	JBQ	0.0364	MDL	4.96	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDD	0.328	JQ	0.0531	MDL	4.96	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.288	JBQ	0.0354	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.301	JB	0.0318	MDL	4.96	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.395	JBQ	0.0331	MDL	4.96	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.110	JQ	0.0966	MDL	0.992	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.202	JQ	0.0805	MDL	0.992	PQL	ng/Kg	J	Z
OCDF	2.03	JB	0.0524	MDL	9.92	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-539-NBZ-SB-0.0-0.5

Collected: 12/12/2013 9:30:00

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)	21	J	11	MDL	26	PQL	mg/Kg	J	Z

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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
EFH (C21-C30)	15		2.1	MDL	5.1	PQL	mg/Kg	J	FD
EFH (C30-C40)	30		4.1	MDL	10	PQL	mg/Kg	J	Q

Sample ID: SL-844-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	6.8		2.0	MDL	5.1	PQL	mg/Kg	J	FD

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-539-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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
4,4'-DDE	1.5	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
4,4'-DDT	1.6	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
DIELDRIN	0.43	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
ENDRIN	0.39	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.55	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-540-NBZ-SB-0.0-0.5

Collected: 12/11/2013 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
DIELDRIN	0.56	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
ENDRIN	0.46	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
HEPTACHLOR	0.54	J	0.20	MDL	0.97	PQL	ug/Kg	J	Z, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-541-NBZ-SB-0.0-0.5

Collected: 12/11/2013 1:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.62	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-542-NBZ-SB-0.0-0.5

Collected: 12/11/2013 12:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.2	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
DELTA-BHC	0.74	J	0.48	MDL	0.88	PQL	ug/Kg	J	Z

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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
4,4'-DDE	0.64	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z
4,4'-DDT	0.90	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-840-NBZ-SB-0.0-0.5

Collected: 12/11/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	1.3	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z
DIELDRIN	2.0	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	FD
ENDRIN	2.0	U	0.39	MDL	2.0	PQL	ug/Kg	UJ	FD
HEPTACHLOR	0.29	J	0.20	MDL	0.97	PQL	ug/Kg	J	Z, FD

Sample ID: SL-844-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.40	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
4,4'-DDT	0.49	J	0.36	MDL	1.7	PQL	ug/Kg	J	Z, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8151A

**Matrix:** SO

Sample ID: SL-540-NBZ-SB-0.0-0.5

Collected: 12/11/2013 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
2,4,5-T	2.0	U	0.97	MDL	2.0	PQL	ug/Kg	UJ	FD
2,4,5-TP (Silvex)	0.98	J	0.88	MDL	2.0	PQL	ug/Kg	J	Z, FD

Sample ID: SL-541-NBZ-SB-0.0-0.5

Collected: 12/11/2013 1:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCP	1200	J	780	MDL	2600	PQL	ug/Kg	J	Z

Sample ID: SL-542-NBZ-SB-0.0-0.5

Collected: 12/11/2013 12:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCP	1300	J	800	MDL	2700	PQL	ug/Kg	J	Z

Sample ID: SL-840-NBZ-SB-0.0-0.5

Collected: 12/11/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	2.2		0.97	MDL	2.0	PQL	ug/Kg	J	FD
2,4,5-TP (Silvex)	2.0	U	0.89	MDL	2.0	PQL	ug/Kg	UJ	FD

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-539-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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
ANTHRACENE	0.38	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.80	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.85	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.86	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.2	MDL	19	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-540-NBZ-SB-0.0-0.5

Collected: 12/11/2013 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-METHYLNAPHTHALENE	2.4		0.79	MDL	2.0	PQL	ug/Kg	J	FD

Sample ID: SL-540-NBZ-SB-0.0-0.5

Collected: 12/11/2013 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
2-METHYLNAPHTHALENE	2.9		0.79	MDL	2.0	PQL	ug/Kg	J	FD
ANTHRACENE	0.53	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	15	J	7.1	MDL	21	PQL	ug/Kg	J	Z
FLUORENE	2.0	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	2.0	U	0.79	MDL	2.0	PQL	ug/Kg	UJ	FD

Sample ID: SL-541-NBZ-SB-0.0-0.5

Collected: 12/11/2013 1:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.74	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-541-NBZ-SB-0.0-0.5

Collected: 12/11/2013 1:25:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.93	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.81	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.85	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.87	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.74	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-542-NBZ-SB-0.0-0.5

Collected: 12/11/2013 12:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.85	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-542-NBZ-SB-0.0-0.5

Collected: 12/11/2013 12:35:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.1	J	6.3	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-543-NBZ-SB-0.0-0.5

Collected: 12/12/2013 1:40:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	8.1	J	3.4	MDL	17	PQL	ug/Kg	J	Z

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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-METHYLNAPHTHALENE	0.72	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z, FD

Sample ID: SL-544-NBZ-SB-0.0-0.5

Collected: 12/12/2013 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
2-METHYLNAPHTHALENE	0.85	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	2.5		0.68	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z, FD
CHRYSENE	2.1		0.34	MDL	1.7	PQL	ug/Kg	J	FD
FLUORANTHENE	2.1		0.68	MDL	1.7	PQL	ug/Kg	J	FD
PHENANTHRENE	1.5	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z, FD
PYRENE	2.0		0.68	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SL-840-NBZ-SB-0.0-0.5

Collected: 12/11/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.9	U	0.78	MDL	1.9	PQL	ug/Kg	UJ	FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-840-NBZ-SB-0.0-0.5

Collected: 12/11/2013 2:40:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.5	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, FD
ANTHRACENE	0.46	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	7.0	MDL	21	PQL	ug/Kg	J	Z
FLUORENE	5.5		0.78	MDL	1.9	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	0.85	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, FD

Sample ID: SL-844-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:40:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.7	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD

Sample ID: SL-844-NBZ-SB-0.0-0.5

Collected: 12/12/2013 2:40:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.7	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	1.7	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	1.7	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.73	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	1.7	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD
CHRYSENE	0.81	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	1.7	U	0.67	MDL	1.7	PQL	ug/Kg	UJ	FD
NAPHTHALENE	1.1	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.80	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, FD
PYRENE	0.67	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z, FD

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

### **Reason Code Legend**

<b><i>Reason Code</i></b>	<b><i>Description</i></b>
B	Method Blank Contamination
E	Laboratory Duplicate Precision
F	Field Blank Contamination
FD	Field Duplicate Precision
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Upper Estimation
S	Surrogate/Tracer Recovery Upper Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**  
**EPA Level III ADR Outliers**  
**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH148



# Method Blank Outlier Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B  
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3520B371906	12/20/2013 7:06:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,6,7,8-HXCDD 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	0.0732 ng/Kg 0.0397 ng/Kg 0.0368 ng/Kg 0.0651 ng/Kg 0.0482 ng/Kg 0.0534 ng/Kg 0.0701 ng/Kg 0.0761 ng/Kg 0.0388 ng/Kg 0.0474 ng/Kg 0.0902 ng/Kg 0.105 ng/Kg 0.238 ng/Kg 0.201 ng/Kg	SL-540-NBZ-SB-0.0-0.5
BLK3530B371602	12/23/2013 4:02:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0690 ng/Kg 0.0520 ng/Kg 0.0556 ng/Kg 0.0531 ng/Kg 0.0586 ng/Kg 0.0403 ng/Kg 0.0545 ng/Kg 0.0536 ng/Kg 0.0525 ng/Kg 0.271 ng/Kg 0.173 ng/Kg	SL-539-NBZ-SB-0.0-0.5 SL-541-NBZ-SB-0.0-0.5 SL-542-NBZ-SB-0.0-0.5 SL-544-NBZ-SB-0.0-0.5 SL-840-NBZ-SB-0.0-0.5 SL-844-NBZ-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-539-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.190 ng/Kg	0.190U ng/Kg
SL-539-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-539-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.280 ng/Kg	0.280U ng/Kg
SL-539-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0803 ng/Kg	0.0803U ng/Kg
SL-539-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.200 ng/Kg	0.200U ng/Kg
SL-539-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.185 ng/Kg	0.185U ng/Kg
SL-540-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.139 ng/Kg	0.139U ng/Kg
SL-540-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.222 ng/Kg	0.222U ng/Kg
SL-540-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0859 ng/Kg	0.0859U ng/Kg
SL-540-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.332 ng/Kg	0.332U ng/Kg
SL-542-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0701 ng/Kg	0.0701U ng/Kg
SL-544-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.161 ng/Kg	0.161U ng/Kg
SL-544-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.165 ng/Kg	0.165U ng/Kg
SL-544-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.150 ng/Kg	0.150U ng/Kg
SL-544-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.229 ng/Kg	0.229U ng/Kg
SL-544-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.232 ng/Kg	0.232U ng/Kg
SL-544-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.250 ng/Kg	0.250U ng/Kg
SL-840-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.172 ng/Kg	0.172U ng/Kg
SL-844-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.272 ng/Kg	0.272U ng/Kg
SL-844-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.198 ng/Kg	0.198U ng/Kg

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35437AB220318	12/27/2013 3:18:00 AM	CALCIUM	14.3 mg/Kg	SL-544-NBZ-SB-0.0-0.5 SL-844-NBZ-SB-0.0-0.5
P35437AB221027	12/26/2013 10:27:00 AM	TIN ZINC	1.62 mg/Kg 0.768 mg/Kg	SL-544-NBZ-SB-0.0-0.5 SL-844-NBZ-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-544-NBZ-SB-0.0-0.5(REA)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-844-NBZ-SB-0.0-0.5(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg

Method: 6020A

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35437AB220009A	1/4/2014 12:09:00 AM	STRONTIUM	0.111 mg/Kg	SL-544-NBZ-SB-0.0-0.5 SL-844-NBZ-SB-0.0-0.5



# Field Blank Outlier Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PrepPH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041613(REA2/TOT)	4/16/2013 3:15:00 PM	MOLYBDENUM TIN	0.0132 mg/L 0.0029 mg/L	SL-539-NBZ-SB-0.0-0.5 SL-540-NBZ-SB-0.0-0.5 SL-541-NBZ-SB-0.0-0.5 SL-542-NBZ-SB-0.0-0.5 SL-543-NBZ-SB-0.0-0.5 SL-544-NBZ-SB-0.0-0.5 SL-840-NBZ-SB-0.0-0.5 SL-844-NBZ-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-544-NBZ-SB-0.0-0.5(RES)	MOLYBDENUM	0.329 mg/Kg	0.329U mg/Kg
SL-844-NBZ-SB-0.0-0.5(RES)	MOLYBDENUM	0.287 mg/Kg	0.287U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8151A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-540-NBZ-SB-0.0-0.5MSD (SL-540-NBZ-SB-0.0-0.5)	2,4-D DICAMBA	- -	148 138	42.00-143.00 55.00-133.00	- -	2,4-D DICAMBA	J (all detects)

Method: 8015M

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-544-NBZ-SB-0.0-0.5MS (SL-544-NBZ-SB-0.0-0.5)	EFH (C30-C40)	28	-	49.00-123.00	-	EFH (C30-C40)	J(all detects) UJ(all non-detects)

Method: 8270D SIM

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-540-NBZ-SB-0.0-0.5MSD (SL-540-NBZ-SB-0.0-0.5)	Di-n-octylphthalate	-	167	52.00-162.00	-	Di-n-octylphthalate	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-544-NBZ-SB-0.0-0.5MS (TOT)	ALUMINUM	1159	1359	75.00-125.00	-	ALUMINUM	No Qual, >4x
SL-544-NBZ-SB-0.0-0.5MSD (TOT)	CALCIUM	133	-	75.00-125.00	-	CALCIUM	
SL-544-NBZ-SB-0.0-0.5MSD (TOT)	IRON	600	1470	75.00-125.00	-	IRON	
SL-544-NBZ-SB-0.0-0.5 (SL-544-NBZ-SB-0.0-0.5)	MAGNESIUM	168	299	75.00-125.00	-	MAGNESIUM	
SL-844-NBZ-SB-0.0-0.5)	TITANIUM	327	323	75.00-125.00	-	TITANIUM	
SL-544-NBZ-SB-0.0-0.5MS (TOT)	ANTIMONY	66	57	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-544-NBZ-SB-0.0-0.5MSD (TOT)	PHOSPHORUS	46	47	75.00-125.00	-	PHOSPHORUS	
SL-544-NBZ-SB-0.0-0.5 (SL-844-NBZ-SB-0.0-0.5)							



# Lab Duplicate Outlier Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-544-NBZ-SB-0.0-0.5DUP (TOT) (SL-544-NBZ-SB-0.0-0.5 SL-844-NBZ-SB-0.0-0.5)	MOLYBDENUM Zirconium	41 22	20.00 20.00	No Qual, OK by Difference

Method: 6020A

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-544-NBZ-SB-0.0-0.5DUP (TOT) (SL-544-NBZ-SB-0.0-0.5 SL-844-NBZ-SB-0.0-0.5)	THALLIUM	21	20.00	No Qual, OK by Difference

Method: 7471B

Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-544-NBZ-SB-0.0-0.5DUP (TOT) (SL-544-NBZ-SB-0.0-0.5 SL-844-NBZ-SB-0.0-0.5)	MERCURY	200	20.00	No Qual, OK by Difference



# Field Duplicate RPD Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 160.3M

Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-540-NBZ-SB-0.0-0.5	SL-840-NBZ-SB-0.0-0.5			
MOISTURE	15.2	15.3	1		No Qualifiers Applied

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5	SL-844-NBZ-SB-0.0-0.5			
MOISTURE	3.7	2.2	51		No Qualifiers Applied

Method: 1613B

Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-540-NBZ-SB-0.0-0.5	SL-840-NBZ-SB-0.0-0.5			
1,2,3,4,7,8-HXCDF	0.337	0.501	39	50.00	No Qualifiers Applied
1,2,3,6,7,8-HXCDF	0.490	0.563	14	50.00	
1,2,3,7,8,9-HXCDF	0.139	0.172	21	50.00	
1,2,3,7,8-PECDD	0.222	0.215	3	50.00	
1,2,3,7,8-PECDF	0.785	1.21	43	50.00	
2,3,4,6,7,8-HXCDF	0.575	0.787	31	50.00	
2,3,4,7,8-PECDF	0.580	0.590	2	50.00	
2,3,7,8-TCDF	0.332	0.466	34	50.00	
OCDF	21.2	35.2	50	50.00	
1,2,3,4,6,7,8-HPCDD	36.2	90.2	85	50.00	J(all detects) UJ(all non-detects)

1,2,3,4,6,7,8-HPCDF	8.53	14.5	52	50.00
1,2,3,4,7,8,9-HPCDF	0.654	1.18	57	50.00
1,2,3,4,7,8-HxCDD	0.350	0.665	62	50.00
1,2,3,6,7,8-HxCDD	1.75	3.07	55	50.00
1,2,3,7,8,9-HxCDD	0.583	1.18	68	50.00
2,3,7,8-TCDD	0.0859	1.16 U	200	50.00
OCDD	288	856	99	50.00

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5	SL-844-NBZ-SB-0.0-0.5			
1,2,3,4,6,7,8-HPCDD	4.41	3.20	32	50.00	No Qualifiers Applied
1,2,3,4,7,8-HxCDD	0.133	0.157	17	50.00	
1,2,3,4,7,8-HXCDF	0.165	0.198	18	50.00	
1,2,3,6,7,8-HxCDD	0.474	0.391	19	50.00	
1,2,3,6,7,8-HXCDF	0.214	0.220	3	50.00	
1,2,3,7,8,9-HxCDD	0.429	0.472	10	50.00	
1,2,3,7,8-PECDF	0.229	0.288	23	50.00	
2,3,4,6,7,8-HXCDF	0.232	0.301	26	50.00	
2,3,4,7,8-PECDF	0.250	0.395	45	50.00	
2,3,7,8-TCDF	0.126	0.202	46	50.00	
OCDD	43.6	26.9	47	50.00	
OCDF	2.24	2.03	10	50.00	

1,2,3,4,6,7,8-HPCDF	1.99	0.851	80	50.00	J(all detects) UJ(all non-detects)
1,2,3,4,7,8,9-HPCDF	0.161	0.272	51	50.00	
1,2,3,7,8,9-HXCDF	0.150	0.258	53	50.00	
1,2,3,7,8-PECDD	0.126	0.328	89	50.00	
2,3,7,8-TCDD	0.993 U	0.110	200	50.00	

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# Field Duplicate RPD Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5 (TOT)	SL-844-NBZ-SB-0.0-0.5 (TOT)			
ALUMINUM	9680	9880	2	50.00	No Qualifiers Applied
ARSENIC	2.84	3.75	28	50.00	
BARIUM	65.1	63.9	2	50.00	
BERYLLIUM	0.359	0.382	6	50.00	
CALCIUM	2090	2070	1	50.00	
CHROMIUM	13.8	13.5	2	50.00	
COBALT	4.46	4.20	6	50.00	
IRON	17600	17800	1	50.00	
LEAD	6.86	8.44	21	50.00	
LITHIUM	25.5	26.1	2	50.00	
MAGNESIUM	3920	3960	1	50.00	
MANGANESE	276	273	1	50.00	
MOLYBDENUM	0.329	0.287	14	50.00	
NICKEL	8.13	7.68	6	50.00	
PHOSPHORUS	385	321	18	50.00	
POTASSIUM	2770	2820	2	50.00	
SODIUM	53.9	57.6	7	50.00	
TIN	2.33	2.76	17	50.00	
TITANIUM	871	959	10	50.00	
VANADIUM	27.3	28.4	4	50.00	
ZINC	51.6	53.6	4	50.00	
ANTIMONY	3.99 U	1.22	200	50.00	J(all detects) UJ(all non-detects)
BORON	8.30	4.20	66	50.00	
CADMIUM	0.464	0.993 U	200	50.00	
COPPER	3.80	6.43	51	50.00	
Zirconium	0.877	4.96 U	200	50.00	

Method: 6020A

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5 (TOT)	SL-844-NBZ-SB-0.0-0.5 (TOT)			
SELENIUM	0.284	0.459	47	50.00	No Qualifiers Applied
SILVER	0.0426	0.0450	5	50.00	
STRONTIUM	9.84	10.2	4	50.00	
THALLIUM	0.218	0.233	7	50.00	

Method: 7471B

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5 (TOT)	SL-844-NBZ-SB-0.0-0.5 (TOT)			
MERCURY	0.0109	0.0096	13	50.00	No Qualifiers Applied

Method: 8015M

Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5	SL-844-NBZ-SB-0.0-0.5			
EFH (C30-C40)	30	20	40	50.00	No Qualifiers Applied
EFH (C21-C30)	15	6.8	75	50.00	J(all detects)



# Field Duplicate RPD Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8081B

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-540-NBZ-SB-0.0-0.5	SL-840-NBZ-SB-0.0-0.5			
4,4'-DDT	2.0	1.3	42	50.00	No Qualifiers Applied
DIELDRIN	0.56	2.0 U	200	50.00	J(all detects) UJ(all non-detects)
ENDRIN	0.46	2.0 U	200	50.00	
HEPTACHLOR	0.54	0.29	60	50.00	

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5	SL-844-NBZ-SB-0.0-0.5			
4,4'-DDE	0.64	0.40	46	50.00	No Qualifiers Applied
4,4'-DDT	0.90	0.49	59	50.00	J(all detects)

Method: 8151A

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-540-NBZ-SB-0.0-0.5	SL-840-NBZ-SB-0.0-0.5			
2,4,5-T	2.0 U	2.2	200	50.00	J(all detects) UJ(all non-detects)
2,4,5-TP (Silvex)	0.98	2.0 U	200	50.00	

Method: 8270D SIM

Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-540-NBZ-SB-0.0-0.5	SL-840-NBZ-SB-0.0-0.5			
ANTHRACENE	0.53	0.46	14	50.00	No Qualifiers Applied
BENZO(A)ANTHRACENE	1.2	1.2	0	50.00	
BENZO(A)PYRENE	1.5	1.4	7	50.00	
BENZO(B)FLUORANTHENE	3.7	3.3	11	50.00	
BENZO(G,H,I)PERYLENE	1.1	1.3	17	50.00	
BENZO(K)FLUORANTHENE	1.2	1.2	0	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	15	13	14	50.00	
CHRYSENE	3.5	3.3	6	50.00	
FLUORANTHENE	2.9	3.1	7	50.00	
NAPHTHALENE	5.3	3.8	33	50.00	
PHENANTHRENE	2.9	2.9	0	50.00	
PYRENE	3.2	2.8	13	50.00	
1-METHYLNAPHTHALENE	2.4	1.9 U	200	50.00	J(all detects) UJ(all non-detects)
2-METHYLNAPHTHALENE	2.9	1.5	64	50.00	
FLUORENE	2.0 U	5.5	200	50.00	
INDENO(1,2,3-CD)PYRENE	2.0 U	0.85	200	50.00	

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5	SL-844-NBZ-SB-0.0-0.5			
NAPHTHALENE	1.7	1.1	43	50.00	No Qualifiers Applied



## Field Duplicate RPD Report

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8270D SIM

Matrix: SO

1-METHYLNAPHTHALENE	0.72	1.7 U	200	50.00	J(all detects) UJ(all non-detects)
2-METHYLNAPHTHALENE	0.85	1.7 U	200	50.00	
BENZO(A)ANTHRACENE	1.2	1.7 U	200	50.00	
BENZO(A)PYRENE	1.2	1.7 U	200	50.00	
BENZO(B)FLUORANTHENE	2.5	0.73	110	50.00	
BENZO(K)FLUORANTHENE	1.0	1.7 U	200	50.00	
CHRYSENE	2.1	0.81	89	50.00	
FLUORANTHENE	2.1	1.7 U	200	50.00	
PHENANTHRENE	1.5	0.80	61	50.00	
PYRENE	2.0	0.67	100	50.00	

Method: 9045M

Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-544-NBZ-SB-0.0-0.5	SL-844-NBZ-SB-0.0-0.5			
PH	6.47	6.41	1	50.00	No Qualifiers Applied



# Reporting Limit Outliers

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-539-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.90	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	1.01	5.17	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.190	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.151	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.131	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.280	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JQ	0.169	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.297	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0803	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.129	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.200	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.185	5.17	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.430	5.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.246	1.03	PQL	ng/Kg	
	OCDF	JB	2.03	10.3	PQL	ng/Kg	
SL-540-NBZ-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.654	5.90	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	J	0.350	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JQ	0.337	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.75	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.490	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.583	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.139	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.222	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.785	5.90	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.575	5.90	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.580	5.90	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0859	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.332	1.18	PQL	ng/Kg	
SL-541-NBZ-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.22	5.07	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JQ	0.343	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.426	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.78	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.419	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.878	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.207	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.304	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.316	5.07	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.577	5.07	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.325	5.07	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.134	1.01	PQL	ng/Kg	
SL-542-NBZ-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.930	5.34	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JQ	0.404	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.366	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.03	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.382	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.799	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0701	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.151	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.402	5.34	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.626	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.345	5.34	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.127	1.07	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-544-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.41	4.96	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.99	4.96	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.161	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.133	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.165	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.474	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JQ	0.214	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	J	0.429	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.150	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.126	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.229	4.96	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.232	4.96	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.250	4.96	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.126	0.993	PQL	ng/Kg	
	OCDF	JB	2.24	9.93	PQL	ng/Kg	
SL-840-NBZ-SB-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	1.18	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JQ	0.665	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.501	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	3.07	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	J	0.563	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	J	1.18	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.172	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.215	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.21	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.787	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.590	5.80	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.466	1.16	PQL	ng/Kg	
SL-844-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.20	4.96	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.851	4.96	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.272	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.157	4.96	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.198	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.391	4.96	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	J	0.220	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JQ	0.472	4.96	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.258	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.328	4.96	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.288	4.96	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.301	4.96	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.395	4.96	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.110	0.992	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.202	0.992	PQL	ng/Kg	
	OCDF	JB	2.03	9.92	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-544-NBZ-SB-0.0-0.5	ARSENIC	J	2.84	3.99	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.359	0.998	PQL	mg/Kg	
	BORON	J	8.30	9.98	PQL	mg/Kg	
	CADMIUM	J	0.464	0.998	PQL	mg/Kg	
	MOLYBDENUM	J	0.329	2.00	PQL	mg/Kg	
	SODIUM	J	53.9	99.8	PQL	mg/Kg	
	TIN	J	2.33	9.98	PQL	mg/Kg	
SL-844-NBZ-SB-0.0-0.5	Zirconium	J	0.877	4.99	PQL	mg/Kg	J (all detects)
	ANTIMONY	J	1.22	3.97	PQL	mg/Kg	
	ARSENIC	J	3.75	3.97	PQL	mg/Kg	
	BERYLLIUM	J	0.382	0.993	PQL	mg/Kg	
	BORON	J	4.20	9.93	PQL	mg/Kg	
	MOLYBDENUM	J	0.287	1.99	PQL	mg/Kg	
	SODIUM	J	57.6	99.3	PQL	mg/Kg	
	TIN	J	2.76	9.93	PQL	mg/Kg	

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-544-NBZ-SB-0.0-0.5	SELENIUM	J	0.284	0.399	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0426	0.200	PQL	mg/Kg	
SL-844-NBZ-SB-0.0-0.5	SILVER	J	0.0450	0.199	PQL	mg/Kg	J (all detects)

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-544-NBZ-SB-0.0-0.5	MERCURY	J	0.0109	0.0170	PQL	mg/Kg	J (all detects)
SL-844-NBZ-SB-0.0-0.5	MERCURY	J	0.0096	0.0158	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-539-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	21	26	PQL	mg/Kg	J (all detects)



# Reporting Limit Outliers

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8081B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-539-NBZ-SB-0.0-0.5	4,4'-DDE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	1.6	1.8	PQL	ug/Kg	
	DIELDRIN	J	0.43	1.8	PQL	ug/Kg	
	ENDRIN	J	0.39	1.8	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.55	1.8	PQL	ug/Kg	
SL-540-NBZ-SB-0.0-0.5	DIELDRIN	J	0.56	2.0	PQL	ug/Kg	J (all detects)
	ENDRIN	J	0.46	2.0	PQL	ug/Kg	
	HEPTACHLOR	J	0.54	0.97	PQL	ug/Kg	
SL-541-NBZ-SB-0.0-0.5	MIREX	J	0.62	1.8	PQL	ug/Kg	J (all detects)
SL-542-NBZ-SB-0.0-0.5	4,4'-DDE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.74	0.88	PQL	ug/Kg	
SL-544-NBZ-SB-0.0-0.5	4,4'-DDE	J	0.64	1.8	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.90	1.8	PQL	ug/Kg	
SL-840-NBZ-SB-0.0-0.5	4,4'-DDT	J	1.3	2.0	PQL	ug/Kg	J (all detects)
	HEPTACHLOR	J	0.29	0.97	PQL	ug/Kg	
SL-844-NBZ-SB-0.0-0.5	4,4'-DDE	J	0.40	1.7	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.49	1.7	PQL	ug/Kg	

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-540-NBZ-SB-0.0-0.5	2,4,5-TP (Silvex)	J	0.98	2.0	PQL	ug/Kg	J (all detects)
SL-541-NBZ-SB-0.0-0.5	MCPP	J	1200	2600	PQL	ug/Kg	J (all detects)
SL-542-NBZ-SB-0.0-0.5	MCPP	J	1300	2700	PQL	ug/Kg	J (all detects)

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-539-NBZ-SB-0.0-0.5	ANTHRACENE	J	0.38	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.80	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.85	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.86	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	19	PQL	ug/Kg	
SL-540-NBZ-SB-0.0-0.5	ANTHRACENE	J	0.53	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.2	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.5	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	21	PQL	ug/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH148

Laboratory: LL

EDD Filename: PH148

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-541-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.74	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.93	1.7	PQL	ug/Kg	
	CHRYSENE	J	0.81	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.85	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.87	1.7	PQL	ug/Kg	
	PYRENE	J	0.74	1.7	PQL	ug/Kg	
SL-542-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.1	19	PQL	ug/Kg	
SL-543-NBZ-SB-0.0-0.5	CHRYSENE	J	8.1	17	PQL	ug/Kg	J (all detects)
SL-544-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.72	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.85	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.7	PQL	ug/Kg	
SL-840-NBZ-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.46	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.85	1.9	PQL	ug/Kg	
SL-844-NBZ-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.73	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.81	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.80	1.7	PQL	ug/Kg	
	PYRENE	J	0.67	1.7	PQL	ug/Kg	



LDC #: 31254E4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH148

ADR

Laboratory: Eurofins Lancaster Laboratories

Date: 2/5/14

Page: 1 of 1

Reviewer: CL

2nd Reviewer: SM

**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: 12/12/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	SW	
VII.	Duplicate Sample Analysis	SW	
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	ICP Serial Dilution	A	
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	N	
XIII.	Field Duplicates	— (1,2)	
XIV.	Field Blanks	SW EB=EB2-121113 & FB=FB-011613	

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

(PH146)  
D = Duplicate  
TB = Trip blank  
EB = Equipment blank

(PH032)

Validated Samples:

soil

1	SL-544-NBZ-SB-0.0-0.5	11	21	31
2	SL-844-NBZ-SB-0.0-0.5	12	22	32
3	SL-544-NBZ-SB-0.0-0.5MS	13	23	33
4	SL-544-NBZ-SB-0.0-0.5MSD	14	24	34
5	SL-544-NBZ-SB-0.0-0.5DUP	15	25	35
6		16	26	36
7		17	27	37
8		18	28	38
9		19	29	39
10		20	30	40

Notes: \_\_\_\_\_



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: mg/L Associated sample units: mg/Kg

Reason: F

Sampling date: 4/16/13 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-041613 (SDG: PH032)	Action Limit	1	2									
Mo	0.0132	6.60	0.329 0.33	0.257 0.25									
Sn	0.0029	1.45											

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".



## QUALITY ASSURANCE SUMMARY

FORM 5A(MS/MSD)

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

SDG No.: PH148

Matrix: SOIL

Level (low/med): LOW

Background Lab Sample ID: 7312462BKG Matrix Spike Lab Sample ID: 7312463MS Matrix Spike Duplicate Lab Sample ID: 7312464MSI  
Batch Id(s): P35437A, P35438A

Analyte	Mass	BKG Sample		MS Sample		MSD Sample		MS Spike Added	MSD Spike Added	Units	MS		MSD		RPD	Control Limit		M
		Result	C	Result	C	Result	C				%R	Q	%R	Q		%R	RPD	
Aluminum		9317.4731		11589.6637		11982.4657		196.0784	196.0784	MG/KG	1159		1159		3			20P
Antimony		0.7115	U	32.5049		27.7686		49.0196	49.0196	MG/KG	66	N	57	N	16	75 - 125		20P
Arsenic		2.7327	B	18.1804		18.6833		14.7059	14.7059	MG/KG	105		108		3	75 - 125		20P
Barium		62.6462		255.2951		271.4314		196.0784	196.0784	MG/KG	98		106		6	75 - 125		20P
Beryllium		0.3462	B	5.3314		5.2284		4.9020	4.9020	MG/KG	102		100		2	75 - 125		20P
Boron		7.9962	B	189.9422		183.7951		196.0784	196.0784	MG/KG	93		90		3	75 - 125		20P
Cadmium		0.4471	B	5.2775		5.3853		4.9020	4.9020	MG/KG	99		101		2	75 - 125		20P
Calcium		2016.1413		2537.8922		2397.5402		392.1569	392.1569	MG/KG	133		97		6			20P
Chromium		13.2865		32.2971		33.1402		19.6078	19.6078	MG/KG	97		101		3	75 - 125		20P
Cobalt		4.2933		51.9922		52.4912		49.0196	49.0196	MG/KG	97		98		1	75 - 125		20P
Copper		3.6587		26.6225		26.3441		24.5098	24.5098	MG/KG	94		93		1	75 - 125		20P
Iron		16917.8615		17505.6676		18359.1608		98.0392	98.0392	MG/KG	600		1470		5			20P
Lead		6.6106		21.3461		20.9804		14.7059	14.7059	MG/KG	100		98		2	75 - 125		20P
Lithium		24.5125		125.2186		125.7725		98.0392	98.0392	MG/KG	103		103		0	75 - 125		20P
Magnesium		3777.8942		4107.7451		4363.5265		196.0784	196.0784	MG/KG	168		299		6			20P
Manganese		265.6144		323.3078		314.0039		49.0196	49.0196	MG/KG	118		99		3			20P
Mercury		0.0105	B	0.1747		0.1718		0.1603	0.1625	MG/KG	102		99		2	65 - 135		20CV
Molybdenum		0.3163	B	186.9255		185.9039		196.0784	196.0784	MG/KG	95		95		1	75 - 125		20P
Nickel		7.8298		57.5000		58.4471		49.0196	49.0196	MG/KG	101		103		2	75 - 125		20P
Phosphorus		371.2154		416.1010		417.3343		98.0392	98.0392	MG/KG	46	N	47	N	0	75 - 125		20P
Potassium		2669.3433		3732.1431		3896.6157		980.3922	980.3922	MG/KG	108		125		4	75 - 125		20P
Selenium	78	0.2733	B	2.4216		2.4569		1.9608	1.9608	MG/KG	110		111		1	75 - 125		20MS
Silver	107	0.0410	B	10.1661		10.6755		9.8039	9.8039	MG/KG	103		108		5	75 - 125		20MS
Sodium		51.8606	B	978.3206		978.1569		980.3922	980.3922	MG/KG	94		94		0	75 - 125		20P
Strontium	88	9.4788		17.1725		17.0571		7.8431	7.8431	MG/KG	98		97		1	75 - 125		20MS
Thallium	203	0.2100		0.6692		0.6776		0.3922	0.3922	MG/KG	117		119		1	75 - 125		20MS
Tin		2.2423	B	362.1784		361.8186		392.1569	392.1569	MG/KG	92		92		0	75 - 125		20P
Titanium		839.1087		1159.3765		1155.5882		98.0392	98.0392	MG/KG	327		323		0			20P
Vanadium		26.3067		76.3961		76.6618		49.0196	49.0196	MG/KG	102		103		0	75 - 125		20P
Zinc		49.6933		98.4696		102.6667		49.0196	49.0196	MG/KG	100		108		4	75 - 125		20P
Zirconium		0.8442	B	93.4049		94.1833		98.0392	98.0392	MG/KG	94		95		1	75 - 125		20P

Note: Results shown are reported on an as-received basis.

## METHODS:

P = ICP Atomic Emission Spectrometer

CV = Cold Vapor

MS = ICP Mass Spectrometry

AF = Cold Vapor Atomic Fluorescence

## CONCENTRATION QUALIFIERS:

U= Below MDL, B= Below LOQ

## FLAGS:

N = Matrix Spike OOS, \* = Duplicate OOS



Background Lab Sample ID: 7312462BKG

Duplicate Lab Sample ID: 7312465DUP

Batch ID(s): P35437A, P35438A

Concentration Units: MG/KG

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum			9317.4731		9613.2804		3		P
Antimony			-0.7952	B	0.7255	U	-200		P
Arsenic			2.7327	B	2.3686	B	14		P
Barium			62.6462		62.4363		0		P
Beryllium			0.3462	B	0.3549	B	2		P
Boron			7.9962	B	7.3971	B	8		P
Cadmium			0.4471	B	0.4755	B	6		P
Calcium			2016.1413		2031.0255		1		P
Chromium		2.9	13.2865		13.1951		1		P
Cobalt		1.0	4.2933		4.4118		3		P
Copper		1.9	3.6587		3.3510		9		P
Iron			16917.8615		17398.5686		3		P
Lead		2.9	6.6106		6.8500		4		P
Lithium			24.5125		27.2059		10		P
Magnesium			3777.8942		3868.3108		2		P
Manganese			265.6144		276.6951		4		P
Mercury			0.0105	B	0.0096	U	200		CV
Molybdenum			0.3163	B	0.2088	B	41		P
Nickel		1.9	7.8298		8.1471		4		P
Phosphorus			371.2154		326.9235		13		P
Potassium			2669.3433		2872.3382		7		P
Selenium	78		0.2733	B	0.2682	B	2		MS
Silver	107		0.0410	B	0.0495	B	19		MS
Sodium			51.8606	B	56.5431	B	9		P
Strontium	88		9.4788		9.4275		1		MS
Thallium	203	0.2	0.2100		0.2596		21		MS
Tin			2.2423	B	2.3147	B	3		P
Titanium			839.1087		933.6922		11		P
Vanadium			26.3067		26.6029		1		P
Zinc			49.6933		52.7069		6		P
Zirconium			0.8442	B	1.0480	B	22		P

NOTE: An asterisk (\*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).

The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

*ok by difference*

Note: Results shown are reported on an as-received basis.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	PH148 Page 2609 of 2876 Duplicate Out of Spec



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH151**

Prepared for

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February 27, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected on December 13, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4), a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)  
Polychlorinated Biphenyls (PCBs) by EPA SW 846 Method 8082A  
Metals by EPA SW 846 Method 6010C, 6020A and 7471B  
Total Petroleum Hydrocarbons (TPH) as Extractables by EPA SW 846 Method 8015M  
Dioxins and Dibenzofurans by EPA Method 1613B

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards (dioxins only), matrix spike/matrix spike duplicates (MS/MSD), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), ICP serial dilutions, method blanks, equipment blanks and field blanks. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of ICB/CCBs and ICP serial dilutions, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

Initial Calibration data were not reviewed for level III.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for level III.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of several blanks for metals and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

## **V. Surrogate Spikes**

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

## **VI. ICP Interference Check Sample (ICS) Analysis**

ICP interference check data were not reviewed for level III.

## **VII. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed at the required frequency. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one MS/MSD pair for metals from SDG PH148. The associated sample results were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosure I of DVR for PH148.

## **VIII. Laboratory Duplicates Sample**

Laboratory duplicates (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## **IX. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.



## **X. Internal Standards**

Internal standards were reviewed for dioxins. Percent recoveries (%R) were within QC limits.

## **XI. ICP Serial Dilution**

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

## **XII. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH151	All compounds reported as detected below the RL.	J (all detects)	A

## **XIII. Field Duplicate Samples**

No field duplicates were identified in this SDG.

## **XIV. Field Blank Samples**

No trip blanks were identified in this SDG.

One equipment blank (from SDG PH146) was collected and analyzed for SVOCs, PCBs, metals, TPH as extractables and dioxins. The equipment blanks had detections for SVOCs and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the equipment blanks, therefore no data were qualified.

One field blank (from SDG PH032) was collected and analyzed for SVOCs, PCBs, metals, TPH as extractables and dioxins. The field blank had detections for SVOCs, metals and dioxins. The associated sample results were qualified as non-detected (U) due to field blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the field blank were not qualified. The field blank outlier reports are presented in Enclosure I.

## **XV. Overall Assessment of Data**

The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. The remainder of the data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



## **Attachment 1**

### **Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2013	SL-521-NBZ-SB-0.0-0.5	7313728	N	3050B	6010C	III
13-Dec-2013	SL-521-NBZ-SB-0.0-0.5	7313728	N	3050B	6020A	III
13-Dec-2013	SL-521-NBZ-SB-0.0-0.5	7313728	N	3546	8015M	III
13-Dec-2013	SL-521-NBZ-SB-0.0-0.5	7313728	N	3546	8270D SIM	III
13-Dec-2013	SL-521-NBZ-SB-0.0-0.5	7313728	N	METHOD	1613B	III
13-Dec-2013	SL-521-NBZ-SB-0.0-0.5	7313728	N	METHOD	7471B	III
13-Dec-2013	SL-557-NBZ-SB-0.0-0.5	7313729	N	3546	8082A	III
13-Dec-2013	SL-557-NBZ-SB-0.0-0.5MSD	P313729M240416A	MSD	3546	8082A	III
13-Dec-2013	SL-557-NBZ-SB-0.0-0.5MS	P313729R240358A	MS	3546	8082A	III
13-Dec-2013	SL-505-NBZ-SB-0.0-0.5	7313727	N	3050B	6010C	III
13-Dec-2013	SL-505-NBZ-SB-0.0-0.5	7313727	N	3050B	6020A	III
13-Dec-2013	SL-505-NBZ-SB-0.0-0.5	7313727	N	3546	8015M	III
13-Dec-2013	SL-505-NBZ-SB-0.0-0.5	7313727	N	3546	8270D SIM	III
13-Dec-2013	SL-505-NBZ-SB-0.0-0.5	7313727	N	METHOD	1613B	III
13-Dec-2013	SL-505-NBZ-SB-0.0-0.5	7313727	N	METHOD	7471B	III



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-505-NBZ-SB-0.0-0.5

Collected: 12/13/2013 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
ANTIMONY	1.34	J	0.767	MDL	4.15	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.570	J	0.0695	MDL	1.04	PQL	mg/Kg	J	Z
BORON	8.32	J	0.871	MDL	10.4	PQL	mg/Kg	J	Z
MOLYBDENUM	0.247	J	0.176	MDL	2.07	PQL	mg/Kg	U	F
SODIUM	68.6	J	17.3	MDL	104	PQL	mg/Kg	J	Z
TIN	3.11	J	0.228	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.09	J	0.871	MDL	5.18	PQL	mg/Kg	J	Z
PHOSPHORUS	510		3.00	MDL	10.4	PQL	mg/Kg	J	Q

Sample ID: SL-521-NBZ-SB-0.0-0.5

Collected: 12/13/2013 9:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.50	J	0.743	MDL	4.01	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.660	J	0.0672	MDL	1.00	PQL	mg/Kg	J	Z
BORON	8.25	J	0.843	MDL	10.0	PQL	mg/Kg	J	Z
MOLYBDENUM	0.176	J	0.171	MDL	2.01	PQL	mg/Kg	U	F
PHOSPHORUS	508		2.90	MDL	10.0	PQL	mg/Kg	J	Q
SODIUM	65.8	J	16.8	MDL	100	PQL	mg/Kg	J	Z
TIN	2.82	J	0.221	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	3.07	J	0.843	MDL	5.02	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-505-NBZ-SB-0.0-0.5

Collected: 12/13/2013 1:00:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0674	J	0.0270	MDL	0.207	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-521-NBZ-SB-0.0-0.5

Collected: 12/13/2013 9:35:00

Analysis Type: REA2

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.150	J	0.100	MDL	0.401	PQL	mg/Kg	J	Z

Sample ID: SL-521-NBZ-SB-0.0-0.5

Collected: 12/13/2013 9:35:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0775	J	0.0261	MDL	0.201	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

Sample ID: SL-521-NBZ-SB-0.0-0.5

Collected: 12/13/2013 9:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0148	J	0.0103	MDL	0.0172	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-505-NBZ-SB-0.0-0.5

Collected: 12/13/2013 1:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.44	JB	0.0270	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.08	JB	0.0280	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.125	JBQ	0.0315	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.147	JB	0.0313	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.224	JB	0.0284	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.394	JB	0.0333	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HxCDF	0.239	JBQ	0.0274	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.419	JB	0.0308	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HxCDF	0.202	JB	0.0280	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.326	JBQ	0.0472	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.718	JB	0.0324	MDL	5.24	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-505-NBZ-SB-0.0-0.5

Collected: 12/13/2013 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
2,3,4,6,7,8-HXCDF	0.272	JBQ	0.0253	MDL	5.24	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.608	JB	0.0296	MDL	5.24	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0807	JQ	0.0521	MDL	1.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.440	JQ	0.0652	MDL	1.05	PQL	ng/Kg	J	Z
OCDF	1.79	JB	0.0277	MDL	10.5	PQL	ng/Kg	J	Z

Sample ID: SL-521-NBZ-SB-0.0-0.5

Collected: 12/13/2013 9:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.19	JB	0.0307	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.625	JB	0.0286	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0807	JBQ	0.0322	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0637	JBQ	0.0389	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.138	JBQ	0.0251	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.283	JB	0.0388	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.155	JBQ	0.0251	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.286	JBQ	0.0376	MDL	5.11	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0773	JB	0.0249	MDL	5.11	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.192	JBQ	0.0272	MDL	5.11	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.163	JBQ	0.0230	MDL	5.11	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.268	JBQ	0.0241	MDL	5.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.161	JQ	0.0539	MDL	1.02	PQL	ng/Kg	J	Z
OCDF	1.10	JB	0.0339	MDL	10.2	PQL	ng/Kg	J	Z

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-505-NBZ-SB-0.0-0.5

Collected: 12/13/2013 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)	15	J	10	MDL	26	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-521-NBZ-SB-0.0-0.5

Collected: 12/13/2013 9:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.2	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-505-NBZ-SB-0.0-0.5

Collected: 12/13/2013 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
ANTHRACENE	0.84	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.4	J	6.3	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.93	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-521-NBZ-SB-0.0-0.5

Collected: 12/13/2013 9:35:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.79	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-521-NBZ-SB-0.0-0.5

Collected: 12/13/2013 9:35:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.75	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.90	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.2	MDL	19	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## ***Data Qualifier Summary***

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

### **Reason Code Legend**

<b><i>Reason Code</i></b>	<b><i>Description</i></b>
B	Method Blank Contamination
E	Laboratory Duplicate Precision
F	Field Blank Contamination
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
S	Surrogate/Tracer Recovery Lower Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH151



# Method Blank Outlier Report

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3550B371359	12/24/2013 1:59:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0769 ng/Kg 0.105 ng/Kg 0.0601 ng/Kg 0.0633 ng/Kg 0.0490 ng/Kg 0.0646 ng/Kg 0.0663 ng/Kg 0.0480 ng/Kg 0.0985 ng/Kg 0.112 ng/Kg 0.0691 ng/Kg 0.0478 ng/Kg 0.0714 ng/Kg 0.301 ng/Kg 0.141 ng/Kg	SL-505-NBZ-SB-0.0-0.5 SL-521-NBZ-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-505-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.125 ng/Kg	0.125U ng/Kg
SL-505-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.147 ng/Kg	0.147U ng/Kg
SL-505-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.224 ng/Kg	0.224U ng/Kg
SL-505-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.239 ng/Kg	0.239U ng/Kg
SL-505-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.202 ng/Kg	0.202U ng/Kg
SL-505-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.326 ng/Kg	0.326U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0807 ng/Kg	0.0807U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0637 ng/Kg	0.0637U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.138 ng/Kg	0.138U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.283 ng/Kg	0.283U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.155 ng/Kg	0.155U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.0773 ng/Kg	0.0773U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.192 ng/Kg	0.192U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.163 ng/Kg	0.163U ng/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.268 ng/Kg	0.268U ng/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35437AB220318	12/27/2013 3:18:00 AM	CALCIUM	14.3 mg/Kg	SL-505-NBZ-SB-0.0-0.5 SL-521-NBZ-SB-0.0-0.5
P35437AB221027	12/26/2013 10:27:00 AM	TIN ZINC	1.62 mg/Kg 0.768 mg/Kg	SL-505-NBZ-SB-0.0-0.5 SL-521-NBZ-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-505-NBZ-SB-0.0-0.5(RES)	TIN	3.11 mg/Kg	3.11U mg/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	TIN	2.82 mg/Kg	2.82U mg/Kg

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 6020A

**Matrix:** SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35437AB220009A	1/4/2014 12:09:00 AM	STRONTIUM	0.111 mg/Kg	SL-505-NBZ-SB-0.0-0.5 SL-521-NBZ-SB-0.0-0.5

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Field Blank Outlier Report

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041613(REA2/TOT)	4/16/2013 3:15:00 PM	MOLYBDENUM TIN	0.0132 mg/L 0.0029 mg/L	SL-505-NBZ-SB-0.0-0.5 SL-521-NBZ-SB-0.0-0.5 SL-557-NBZ-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-505-NBZ-SB-0.0-0.5(RES)	MOLYBDENUM	0.247 mg/Kg	0.247U mg/Kg
SL-521-NBZ-SB-0.0-0.5(RES)	MOLYBDENUM	0.176 mg/Kg	0.176U mg/Kg



# Reporting Limit Outliers

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-505-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.44	5.24	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.08	5.24	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.125	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.147	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.224	5.24	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.394	5.24	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.239	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.419	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.202	5.24	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.326	5.24	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JB	0.718	5.24	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.272	5.24	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JB	0.608	5.24	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0807	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.440	1.05	PQL	ng/Kg	
	OCDF	JB	1.79	10.5	PQL	ng/Kg	
SL-521-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.19	5.11	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.625	5.11	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0807	5.11	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0637	5.11	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.138	5.11	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.283	5.11	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.155	5.11	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.286	5.11	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.0773	5.11	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JBQ	0.192	5.11	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.163	5.11	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JBQ	0.268	5.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.161	1.02	PQL	ng/Kg	
	OCDF	JB	1.10	10.2	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-505-NBZ-SB-0.0-0.5	ANTIMONY	J	1.34	4.15	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.570	1.04	PQL	mg/Kg	
	BORON	J	8.32	10.4	PQL	mg/Kg	
	MOLYBDENUM	J	0.247	2.07	PQL	mg/Kg	
	SODIUM	J	68.6	104	PQL	mg/Kg	
	TIN	J	3.11	10.4	PQL	mg/Kg	
	Zirconium	J	2.09	5.18	PQL	mg/Kg	
SL-521-NBZ-SB-0.0-0.5	ANTIMONY	J	1.50	4.01	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.660	1.00	PQL	mg/Kg	
	BORON	J	8.25	10.0	PQL	mg/Kg	
	MOLYBDENUM	J	0.176	2.01	PQL	mg/Kg	
	SODIUM	J	65.8	100	PQL	mg/Kg	
	TIN	J	2.82	10.0	PQL	mg/Kg	
	Zirconium	J	3.07	5.02	PQL	mg/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH151

Laboratory: LL

EDD Filename: PH151

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6020A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-505-NBZ-SB-0.0-0.5	SILVER	J	0.0674	0.207	PQL	mg/Kg	J (all detects)
SL-521-NBZ-SB-0.0-0.5	SELENIUM	J	0.150	0.401	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0775	0.201	PQL	mg/Kg	J (all detects)

Method: 7471B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-521-NBZ-SB-0.0-0.5	MERCURY	J	0.0148	0.0172	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-505-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	15	26	PQL	mg/Kg	J (all detects)
SL-521-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	4.2	5.2	PQL	mg/Kg	J (all detects)

Method: 8270D SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-505-NBZ-SB-0.0-0.5	ANTHRACENE	J	0.84	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.4	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.93	1.7	PQL	ug/Kg	
SL-521-NBZ-SB-0.0-0.5	1-METHYLNAPHTHALENE	J	0.79	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.75	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.90	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	19	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.7	PQL	ug/Kg	



LDC #: 31254F4

## VALIDATION COMPLETENESS WORKSHEET

Date: 2/5/14

SDG #: PH151

ADR

Page: 1 of 1

Laboratory: Eurofins Lancaster Laboratories

Reviewer: OL

2nd Reviewer: SA

**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: 12/13/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (see PH148)
VII.	Duplicate Sample Analysis	N	DP ↓
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	ICP Serial Dilution	A	
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	N	
XIII.	Field Duplicates	—	
XIV.	Field Blanks	SW	EB = EPA-121113 FB = FB-041613

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

ND = No compounds detected  
R = Rinsate  
FB = Field blank

(PH146)  
D = Duplicate  
TB = Trip blank  
EB = Equipment blank

(PH032)

Validated Samples:

SOI

1	SL-505-NBZ-SB-0.0-0.5	11		21		31	
2	SL-521-NBZ-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: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: mg/L Associated sample units: mg/Kg

Reason: F

Sampling date: 4/16/13 Soil factor applied 100x

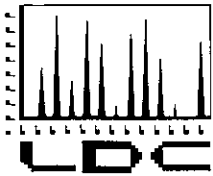
Field blank type: (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-041613 (SDG: PH032)	Action Limit	1	2									
Mo	0.0132	6.60	0.247 0.25	0.176 0.18									
Sn	0.0029	1.45											

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".





**LABORATORY DATA CONSULTANTS, INC.**  
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

CDM  
555 17th Street, Suite 1100  
Denver, CO 80202  
ATTN: Mrs. Cherie Zakowski

March 4, 2014

SUBJECT: Santa Susana Field Laboratory, Subarea NBZ Data Validation

Dear Mrs. Zakowski,

Enclosed is the final validation report for the fractions listed below. This SDG was received on February 5, 2014. Attachment 1 is a summary of the samples that were reviewed for each analysis.

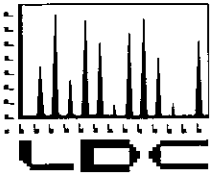
**LDC Project # 31275:**

<b><u>SDG #</u></b>	<b><u>Fraction</u></b>
PH155	Semivolatiles, Metals, Total Petroleum Hydrocarbons as Gasoline, Total Petroleum Hydrocarbons as Extractables, Dioxins/Dibenzofurans

The data validation was performed under Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Quality Assurance Project Plan for Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit, March 2009, Revision 4
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010
- Polychlorinated Dioxins/Dibenzofurans Data Review, September 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007





Please feel free to contact us if you have any questions.

Sincerely,

Shauna McKellar  
Project Manager/Chemist



90/10 ADR/IV LDC #31275 (CDM Federal Programs-Chantilly VA / Santa Susana Field Laboratory, Subarea NBZ)

[illegible]



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH155**

Prepared for

**CDM Smith**  
555 17th Street, Suite 1100  
Denver, CO 80202

Prepared by

**Laboratory Data Consultants, Inc.**  
2701 Loker Ave West, Suite 220  
Carlsbad, California 92010

March 3, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected on December 16, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4), a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)  
Metals by EPA SW 846 Method 6010C, 6020A, 7470A and 7471B  
Total Petroleum Hydrocarbons (TPH) as Gasoline by EPA SW 846 Method 8015M  
TPH as Extractables by EPA SW 846 Method 8015M  
Dioxins and Dibenzofurans by EPA Method 1613B

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards (dioxins only), matrix spike/matrix spike duplicates (MS/MSD), laboratory duplicates (DUP), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), ICP serial dilutions, method blanks, trip blanks, equipment blanks and field blanks. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of ICB/CCBs and ICP serial dilutions, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## **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 QC criteria.

## **II. Initial Calibration**

Initial Calibration data were not reviewed for level III.

## **III. Continuing Calibration**

Continuing calibration data were not reviewed for level III.

## **IV. Blanks**

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of several blanks for SVOCs, metals and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

No contaminant concentrations were detected in the initial or continuing calibration blanks.

## **V. Surrogate Spikes**

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

## **VI. ICP Interference Check Sample (ICS) Analysis**

ICP interference check data were not reviewed for level III.

## **VII. Matrix Spike/Matrix Spike Duplicates**

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed at the required frequency. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one MS/MSD pair for metals from SDG PH148. The associated sample results were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosure I of the DVR for PH148.

## **VIII. Laboratory Duplicates Sample**

Laboratory duplicates (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

## **IX. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.



## **X. Internal Standards**

Internal standards were reviewed for dioxins. Percent recoveries (%R) were within QC limits.

## **XI. ICP Serial Dilution**

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

## **XII. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH155	All compounds reported as detected below the RL.	J (all detects)	A

## **XIII. Field Duplicate Samples**

No field duplicates were identified in this SDG.

## **XIV. Field Blank Samples**

One trip blank was collected and analyzed for TPH as gasoline. No volatile contaminants were found in the trip blank.

One equipment blank was collected and analyzed for SVOCs, metals, TPH as gasoline, TPH as extractables and dioxins. The equipment blanks had detections for SVOCs and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the equipment blanks, therefore no data were qualified.

One field blank (from SDG PH032) was collected and analyzed for SVOCs, metals, TPH as gasoline, TPH as extractables and dioxins. The field blank had detections for SVOCs, metals and dioxins. The associated sample results were qualified as non-detected (U) due to field blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the field blank were not qualified. The field blank outlier reports are presented in Enclosure I.

## **XV. Overall Assessment of Data**

The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. The remainder of the data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



## **Attachment 1**

### **Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Dec-2013	TB2-121613	7315442	TB	5030B	8015M	III
16-Dec-2013	SL-520-NBZ-SB-0.0-0.5	7315441	N	3050B	6010C	III
16-Dec-2013	SL-520-NBZ-SB-0.0-0.5	7315441	N	3050B	6020A	III
16-Dec-2013	SL-520-NBZ-SB-0.0-0.5	7315441	N	3546	8015M	III
16-Dec-2013	SL-520-NBZ-SB-0.0-0.5	7315441	N	3546	8270D SIM	III
16-Dec-2013	SL-520-NBZ-SB-0.0-0.5	7315441	N	METHOD	1613B	III
16-Dec-2013	SL-520-NBZ-SB-0.0-0.5	7315441	N	METHOD	7471B	III
16-Dec-2013	SL-518-NBZ-SB-0.0-0.5	7315439	N	3050B	6010C	III
16-Dec-2013	SL-518-NBZ-SB-0.0-0.5	7315439	N	3050B	6020A	III
16-Dec-2013	SL-518-NBZ-SB-0.0-0.5	7315439	N	3546	8015M	III
16-Dec-2013	SL-518-NBZ-SB-0.0-0.5	7315439	N	3546	8270D SIM	III
16-Dec-2013	SL-518-NBZ-SB-0.0-0.5	7315439	N	METHOD	1613B	III
16-Dec-2013	SL-518-NBZ-SB-0.0-0.5	7315439	N	METHOD	7471B	III
16-Dec-2013	SL-519-NBZ-SB-0.0-0.5	7315440	N	3050B	6010C	III
16-Dec-2013	SL-519-NBZ-SB-0.0-0.5	7315440	N	3050B	6020A	III
16-Dec-2013	SL-519-NBZ-SB-0.0-0.5	7315440	N	3546	8015M	III
16-Dec-2013	SL-519-NBZ-SB-0.0-0.5	7315440	N	3546	8270D SIM	III
16-Dec-2013	SL-519-NBZ-SB-0.0-0.5	7315440	N	METHOD	1613B	III
16-Dec-2013	SL-519-NBZ-SB-0.0-0.5	7315440	N	METHOD	7471B	III
16-Dec-2013	SL-517-NBZ-SB-0.0-0.5	7315437	N	3050B	6010C	III
16-Dec-2013	SL-517-NBZ-SB-0.0-0.5	7315437	N	3050B	6020A	III
16-Dec-2013	SL-517-NBZ-SB-0.0-0.5	7315437	N	3546	8015M	III
16-Dec-2013	SL-517-NBZ-SB-0.0-0.5	7315437	N	3546	8270D SIM	III
16-Dec-2013	SL-517-NBZ-SB-0.0-0.5	7315437	N	METHOD	1613B	III
16-Dec-2013	SL-517-NBZ-SB-0.0-0.5	7315437	N	METHOD	7471B	III
16-Dec-2013	SL-517-NBZ-SB-2.0-3.0	7315438	N	3050B	6010C	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
16-Dec-2013	SL-517-NBZ-SB-2.0-3.0	7315438	N	3050B	6020A	III
16-Dec-2013	SL-517-NBZ-SB-2.0-3.0	7315438	N	3546	8015M	III
16-Dec-2013	SL-517-NBZ-SB-2.0-3.0	7315438	N	3546	8270D SIM	III
16-Dec-2013	SL-517-NBZ-SB-2.0-3.0	7315438	N	5035A	8015M	III
16-Dec-2013	SL-517-NBZ-SB-2.0-3.0	7315438	N	METHOD	1613B	III
16-Dec-2013	SL-517-NBZ-SB-2.0-3.0	7315438	N	METHOD	7471B	III
16-Dec-2013	EB2-121613	7315443	EB	3005A	6010C	III
16-Dec-2013	EB2-121613	7315443	EB	3510C	8015M	III
16-Dec-2013	EB2-121613	7315443	EB	3510C	8270D SIM	III
16-Dec-2013	EB2-121613	7315443	EB	5030B	8015M	III
16-Dec-2013	EB2-121613	7315443	EB	M3010A	6020A	III
16-Dec-2013	EB2-121613	7315443	EB	METHOD	1613B	III
16-Dec-2013	EB2-121613	7315443	EB	METHOD	7470A	III



**Attachment 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-517-NBZ-SB-0.0-0.5

Collected: 12/16/2013 1:40:00

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	2.22	J	0.764	MDL	4.13	PQL	mg/Kg	J	Z, Q
BORON	9.81	J	0.867	MDL	10.3	PQL	mg/Kg	J	Z
MOLYBDENUM	0.230	J	0.176	MDL	2.06	PQL	mg/Kg	U	F
SODIUM	97.6	J	17.2	MDL	103	PQL	mg/Kg	J	Z
TIN	4.06	J	0.227	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	4.64	J	0.867	MDL	5.16	PQL	mg/Kg	J	Z
PHOSPHORUS	595		2.98	MDL	10.3	PQL	mg/Kg	J	Q

Sample ID: SL-517-NBZ-SB-2.0-3.0

Collected: 12/16/2013 2:20:00

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	2.25	J	0.782	MDL	4.23	PQL	mg/Kg	J	Z, Q
BORON	7.71	J	0.888	MDL	10.6	PQL	mg/Kg	J	Z
PHOSPHORUS	500		3.05	MDL	10.6	PQL	mg/Kg	J	Q
TIN	3.79	J	0.232	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	4.14	J	0.888	MDL	5.28	PQL	mg/Kg	J	Z

Sample ID: SL-518-NBZ-SB-0.0-0.5

Collected: 12/16/2013 11:25:00

Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.73	J	0.745	MDL	4.02	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.675	J	0.0674	MDL	1.01	PQL	mg/Kg	J	Z
BORON	6.14	J	0.845	MDL	10.1	PQL	mg/Kg	J	Z
MOLYBDENUM	0.256	J	0.171	MDL	2.01	PQL	mg/Kg	U	F
PHOSPHORUS	497		2.91	MDL	10.1	PQL	mg/Kg	J	Q
SODIUM	60.7	J	16.8	MDL	101	PQL	mg/Kg	J	Z
TIN	3.05	J	0.221	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	2.88	J	0.845	MDL	5.03	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

3/3/2014 11:46:20 AM

ADR version 1.7.0.207

Page 1 of 11



# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-519-NBZ-SB-0.0-0.5

Collected: 12/16/2013 12:10:00 Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.46	J	0.725	MDL	3.92	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.579	J	0.0656	MDL	0.980	PQL	mg/Kg	J	Z
BORON	5.54	J	0.823	MDL	9.80	PQL	mg/Kg	J	Z
MOLYBDENUM	0.226	J	0.167	MDL	1.96	PQL	mg/Kg	U	F
PHOSPHORUS	447		2.83	MDL	9.80	PQL	mg/Kg	J	Q
SODIUM	71.2	J	16.4	MDL	98.0	PQL	mg/Kg	J	Z
TIN	2.57	J	0.216	MDL	9.80	PQL	mg/Kg	U	B
Zirconium	2.03	J	0.823	MDL	4.90	PQL	mg/Kg	J	Z

Sample ID: SL-520-NBZ-SB-0.0-0.5

Collected: 12/16/2013 10:30:00 Analysis Type: REA

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	1.15	J	0.737	MDL	3.98	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.393	J	0.0667	MDL	0.995	PQL	mg/Kg	J	Z
BORON	5.50	J	0.836	MDL	9.95	PQL	mg/Kg	J	Z
MOLYBDENUM	0.259	J	0.169	MDL	1.99	PQL	mg/Kg	U	F
PHOSPHORUS	332		2.88	MDL	9.95	PQL	mg/Kg	J	Q
SODIUM	58.3	J	16.6	MDL	99.5	PQL	mg/Kg	J	Z
TIN	2.44	J	0.219	MDL	9.95	PQL	mg/Kg	U	B
Zirconium	1.80	J	0.836	MDL	4.98	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-517-NBZ-SB-0.0-0.5

Collected: 12/16/2013 1:40:00 Analysis Type: REA2

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.106	J	0.0268	MDL	0.206	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-517-NBZ-SB-0.0-0.5

Collected: 12/16/2013 1:40:00

Analysis Type: REA4

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.312	J	0.103	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: SL-517-NBZ-SB-2.0-3.0

Collected: 12/16/2013 2:20:00

Analysis Type: REA2

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0914	J	0.0275	MDL	0.211	PQL	mg/Kg	J	Z

Sample ID: SL-517-NBZ-SB-2.0-3.0

Collected: 12/16/2013 2:20:00

Analysis Type: REA4

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.305	J	0.106	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-518-NBZ-SB-0.0-0.5

Collected: 12/16/2013 11:25:00

Analysis Type: REA2

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0584	J	0.0262	MDL	0.201	PQL	mg/Kg	J	Z

Sample ID: SL-518-NBZ-SB-0.0-0.5

Collected: 12/16/2013 11:25:00

Analysis Type: REA4

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.227	J	0.101	MDL	0.402	PQL	mg/Kg	J	Z

Sample ID: SL-519-NBZ-SB-0.0-0.5

Collected: 12/16/2013 12:10:00

Analysis Type: REA2

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0429	J	0.0255	MDL	0.196	PQL	mg/Kg	J	Z

Sample ID: SL-519-NBZ-SB-0.0-0.5

Collected: 12/16/2013 12:10:00

Analysis Type: REA4

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0980	MDL	0.392	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-520-NBZ-SB-0.0-0.5

Collected: 12/16/2013 10:30:00

Analysis Type: REA4

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0995	MDL	0.398	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 7471B

**Matrix:** SO

Sample ID: SL-517-NBZ-SB-2.0-3.0

Collected: 12/16/2013 2:20:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0144	J	0.0101	MDL	0.0168	PQL	mg/Kg	J	Z

Sample ID: SL-518-NBZ-SB-0.0-0.5

Collected: 12/16/2013 11:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0126	J	0.0103	MDL	0.0172	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** AQ

Sample ID: EB2-121613

Collected: 12/16/2013 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	0.943	JB	0.531	MDL	10.0	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.721	JBQ	0.129	MDL	10.0	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.388	JB	0.255	MDL	10.0	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.456	JBQ	0.376	MDL	10.0	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.581	JBQ	0.314	MDL	10.0	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.658	JBQ	0.343	MDL	10.0	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.331	JBQ	0.243	MDL	10.0	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.493	JBQ	0.319	MDL	10.0	PQL	pg/L	U	B
2,3,7,8-TCDF	0.772	JBQ	0.520	MDL	2.00	PQL	pg/L	U	B
OCDD	2.16	JBQ	0.488	MDL	20.0	PQL	pg/L	U	B
OCDF	1.24	JBQ	0.728	MDL	20.0	PQL	pg/L	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** AQ

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-517-NBZ-SB-0.0-0.5

Collected: 12/16/2013 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	0.913	JB	0.0244	MDL	5.07	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.310	JB	0.0158	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.132	JB	0.0190	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.110	JBQ	0.0287	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.222	JBQ	0.0193	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.166	JB	0.0315	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.199	JB	0.0190	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.191	JB	0.0289	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.234	JB	0.0217	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.318	JBQ	0.0330	MDL	5.07	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.408	JB	0.0200	MDL	5.07	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HxCDF	0.155	JBQ	0.0185	MDL	5.07	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.369	JB	0.0179	MDL	5.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0989	JQ	0.0432	MDL	1.01	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.147	J	0.0398	MDL	1.01	PQL	ng/Kg	J	Z
OCDD	6.05	JB	0.0157	MDL	10.1	PQL	ng/Kg	J	Z
OCDF	0.643	JB	0.0276	MDL	10.1	PQL	ng/Kg	U	B

Sample ID: SL-517-NBZ-SB-2.0-3.0

Collected: 12/16/2013 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-HPCDD	0.0841	JBQ	0.0178	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0717	JBQ	0.00971	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0429	JB	0.0111	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0457	JBQ	0.0207	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.0513	JBQ	0.0129	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0364	JB	0.0217	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.0436	JBQ	0.0128	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0539	JBQ	0.0199	MDL	5.28	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-517-NBZ-SB-2.0-3.0

Collected: 12/16/2013 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
1,2,3,7,8,9-HXCDF	0.0587	JBQ	0.0126	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0440	JB	0.0257	MDL	5.28	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0726	JBQ	0.0145	MDL	5.28	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0254	JBQ	0.0118	MDL	5.28	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0428	JB	0.0136	MDL	5.28	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0455	JQ	0.0415	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0363	JQ	0.0289	MDL	1.06	PQL	ng/Kg	J	Z
OCDD	0.516	JB	0.0185	MDL	10.6	PQL	ng/Kg	U	B
OCDF	0.146	JBQ	0.0236	MDL	10.6	PQL	ng/Kg	U	B

Sample ID: SL-518-NBZ-SB-0.0-0.5

Collected: 12/16/2013 11:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.12	JB	0.0291	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.605	JB	0.0241	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.135	JB	0.0284	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0699	JBQ	0.0292	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.155	JB	0.0232	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.259	JB	0.0313	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.165	JB	0.0234	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.297	JBQ	0.0282	MDL	5.18	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.154	JB	0.0238	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0876	JBQ	0.0346	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.142	JB	0.0294	MDL	5.18	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.158	JBQ	0.0209	MDL	5.18	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.380	JB	0.0270	MDL	5.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.151	J	0.0561	MDL	1.04	PQL	ng/Kg	J	Z
OCDF	0.950	JB	0.0272	MDL	10.4	PQL	ng/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-519-NBZ-SB-0.0-0.5

Collected: 12/16/2013 12:10:00 Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.45	JB	0.0258	MDL	5.13	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.364	JB	0.0172	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0896	JBQ	0.0212	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0614	JBQ	0.0329	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0821	JBQ	0.0208	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.191	JB	0.0341	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.112	JB	0.0202	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.258	JB	0.0324	MDL	5.13	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.174	JBQ	0.0213	MDL	5.13	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.128	JBQ	0.0206	MDL	5.13	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0664	JB	0.0199	MDL	5.13	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.188	JBQ	0.0186	MDL	5.13	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0786	JQ	0.0440	MDL	1.03	PQL	ng/Kg	J	Z
OCDD	10.0	JB	0.0218	MDL	10.3	PQL	ng/Kg	J	Z
OCDF	0.824	JB	0.0298	MDL	10.3	PQL	ng/Kg	J	Z

Sample ID: SL-520-NBZ-SB-0.0-0.5

Collected: 12/16/2013 10:30:00 Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.27	JB	0.0203	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.342	JBQ	0.0154	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0671	JBQ	0.0182	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0646	JB	0.0258	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0827	JBQ	0.0182	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.355	JB	0.0257	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.131	JBQ	0.0179	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.578	JB	0.0258	MDL	4.99	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0645	JB	0.0195	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0334	JBQ	0.0326	MDL	4.99	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.210	JBQ	0.0199	MDL	4.99	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.110	JBQ	0.0176	MDL	4.99	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.176	JBQ	0.0188	MDL	4.99	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-520-NBZ-SB-0.0-0.5

Collected: 12/16/2013 10:30:00 Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.102	J	0.0396	MDL	0.997	PQL	ng/Kg	J	Z
OCDD	9.90	JB	0.0157	MDL	9.97	PQL	ng/Kg	J	Z
OCDF	0.593	JBQ	0.0222	MDL	9.97	PQL	ng/Kg	U	B

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-517-NBZ-SB-0.0-0.5

Collected: 12/16/2013 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 (C15-C20)	2.1	J	2.1	MDL	5.2	PQL	mg/Kg	J	Z

Sample ID: SL-517-NBZ-SB-2.0-3.0

Collected: 12/16/2013 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
EFH (C21-C30)	5.0	J	2.1	MDL	5.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	9.3	J	4.2	MDL	11	PQL	mg/Kg	J	Z

Sample ID: SL-518-NBZ-SB-0.0-0.5

Collected: 12/16/2013 11:25:00 Analysis Type: RES

Dilution: 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	14	J	10	MDL	26	PQL	mg/Kg	J	Z

Sample ID: SL-519-NBZ-SB-0.0-0.5

Collected: 12/16/2013 12:10:00 Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.8	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

Sample ID: SL-520-NBZ-SB-0.0-0.5

Collected: 12/16/2013 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)	2.1	J	2.0	MDL	5.0	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** AQ

Sample ID: EB2-121613

Collected: 12/16/2013 3:30:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	2.2		0.053	MDL	1.1	PQL	ug/L	U	B
Diethylphthalate	0.35	J	0.053	MDL	1.1	PQL	ug/L	U	B
Di-n-butylphthalate	0.23	J	0.053	MDL	1.1	PQL	ug/L	U	B
Di-n-octylphthalate	0.060	J	0.053	MDL	1.1	PQL	ug/L	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-517-NBZ-SB-0.0-0.5

Collected: 12/16/2013 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
2-METHYLNAPHTHALENE	0.99	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.2	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-517-NBZ-SB-2.0-3.0

Collected: 12/16/2013 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
CHRYSENE	0.44	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-518-NBZ-SB-0.0-0.5

Collected: 12/16/2013 11:25:00

Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.3	J	0.68	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	13	J	6.1	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

3/3/2014 11:46:20 AM

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# Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-519-NBZ-SB-0.0-0.5

Collected: 12/16/2013 12:10:00 Analysis Type: RES-BASE/NEUTRAL Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.97	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.70	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.82	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.68	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-520-NBZ-SB-0.0-0.5

Collected: 12/16/2013 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
BENZO(A)PYRENE	0.68	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.33	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.95	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
B	Method Blank Contamination
F	Field Blank Contamination
Q	Matrix Spike Lower Estimation
S	Surrogate/Tracer Recovery Lower Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH155



# Method Blank Outlier Report

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3540B370624	12/24/2013 6:24:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	1.14 pg/L 0.673 pg/L 0.654 pg/L 0.265 pg/L 0.275 pg/L 0.463 pg/L 0.528 pg/L 0.645 pg/L 0.520 pg/L 0.464 pg/L 0.341 pg/L 0.499 pg/L 0.513 pg/L 0.357 pg/L 2.27 pg/L 1.88 pg/L	EB2-121613

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB2-121613(RES)	1,2,3,4,6,7,8-HPCDD	0.943 pg/L	0.943U pg/L
EB2-121613(RES)	1,2,3,4,6,7,8-HPCDF	0.721 pg/L	0.721U pg/L
EB2-121613(RES)	1,2,3,4,7,8-HxCDF	0.388 pg/L	0.388U pg/L
EB2-121613(RES)	1,2,3,7,8,9-HxCDD	0.456 pg/L	0.456U pg/L
EB2-121613(RES)	1,2,3,7,8,9-HxCDF	0.581 pg/L	0.581U pg/L
EB2-121613(RES)	1,2,3,7,8-PECDF	0.658 pg/L	0.658U pg/L
EB2-121613(RES)	2,3,4,6,7,8-HxCDF	0.331 pg/L	0.331U pg/L
EB2-121613(RES)	2,3,4,7,8-PECDF	0.493 pg/L	0.493U pg/L
EB2-121613(RES)	2,3,7,8-TCDF	0.772 pg/L	0.772U pg/L
EB2-121613(RES)	OCDD	2.16 pg/L	2.16U pg/L
EB2-121613(RES)	OCDF	1.24 pg/L	1.24U pg/L

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3550B371359	12/24/2013 1:59:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF OCDD OCDF	0.0769 ng/Kg 0.105 ng/Kg 0.0601 ng/Kg 0.0633 ng/Kg 0.0490 ng/Kg 0.0646 ng/Kg 0.0663 ng/Kg 0.0480 ng/Kg 0.0985 ng/Kg 0.112 ng/Kg 0.0691 ng/Kg 0.0478 ng/Kg 0.0714 ng/Kg 0.301 ng/Kg 0.141 ng/Kg	SL-517-NBZ-SB-0.0-0.5 SL-517-NBZ-SB-2.0-3.0 SL-518-NBZ-SB-0.0-0.5 SL-519-NBZ-SB-0.0-0.5 SL-520-NBZ-SB-0.0-0.5

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

3/3/2014 11:35:45 AM

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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*The following samples and their listed target analytes were qualified due to contamination reported in this blank*

Sample ID	Analyte	Reported Result	Modified Final Result
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.310 ng/Kg	0.310U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.132 ng/Kg	0.132U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.110 ng/Kg	0.110U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.222 ng/Kg	0.222U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.166 ng/Kg	0.166U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.199 ng/Kg	0.199U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.191 ng/Kg	0.191U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.234 ng/Kg	0.234U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.318 ng/Kg	0.318U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.155 ng/Kg	0.155U ng/Kg
SL-517-NBZ-SB-0.0-0.5(RES)	OCDF	0.643 ng/Kg	0.643U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCCD	0.0841 ng/Kg	0.0841U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0717 ng/Kg	0.0717U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDD	0.0457 ng/Kg	0.0457U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDF	0.0513 ng/Kg	0.0513U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,6,7,8-HxCDD	0.0364 ng/Kg	0.0364U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,6,7,8-HxCDF	0.0436 ng/Kg	0.0436U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,7,8,9-HxCDD	0.0539 ng/Kg	0.0539U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,7,8,9-HxCDF	0.0587 ng/Kg	0.0587U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0440 ng/Kg	0.0440U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0726 ng/Kg	0.0726U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	2,3,4,6,7,8-HxCDF	0.0254 ng/Kg	0.0254U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.0428 ng/Kg	0.0428U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	OCDD	0.516 ng/Kg	0.516U ng/Kg
SL-517-NBZ-SB-2.0-3.0(RES)	OCDF	0.146 ng/Kg	0.146U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.135 ng/Kg	0.135U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0699 ng/Kg	0.0699U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.155 ng/Kg	0.155U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.259 ng/Kg	0.259U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.165 ng/Kg	0.165U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.154 ng/Kg	0.154U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0876 ng/Kg	0.0876U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.142 ng/Kg	0.142U ng/Kg
SL-518-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.158 ng/Kg	0.158U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.364 ng/Kg	0.364U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0896 ng/Kg	0.0896U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0614 ng/Kg	0.0614U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.0821 ng/Kg	0.0821U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.191 ng/Kg	0.191U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-519-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.174 ng/Kg	0.174U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.128 ng/Kg	0.128U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0664 ng/Kg	0.0664U ng/Kg
SL-519-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.188 ng/Kg	0.188U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.342 ng/Kg	0.342U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0671 ng/Kg	0.0671U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0646 ng/Kg	0.0646U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0827 ng/Kg	0.0827U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0645 ng/Kg	0.0645U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0334 ng/Kg	0.0334U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.210 ng/Kg	0.210U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.110 ng/Kg	0.110U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.176 ng/Kg	0.176U ng/Kg
SL-520-NBZ-SB-0.0-0.5(RES)	OCDF	0.593 ng/Kg	0.593U ng/Kg

Method: 6010C

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35437AB220318	12/27/2013 3:18:00 AM	CALCIUM	14.3 mg/Kg	SL-517-NBZ-SB-0.0-0.5 SL-517-NBZ-SB-2.0-3.0 SL-518-NBZ-SB-0.0-0.5 SL-519-NBZ-SB-0.0-0.5 SL-520-NBZ-SB-0.0-0.5
P35437AB221027	12/26/2013 10:27:00 AM	TIN ZINC	1.62 mg/Kg 0.768 mg/Kg	SL-517-NBZ-SB-0.0-0.5 SL-517-NBZ-SB-2.0-3.0 SL-518-NBZ-SB-0.0-0.5 SL-519-NBZ-SB-0.0-0.5 SL-520-NBZ-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-517-NBZ-SB-0.0-0.5(REA)	TIN	4.06 mg/Kg	4.06U mg/Kg
SL-517-NBZ-SB-2.0-3.0(REA)	TIN	3.79 mg/Kg	3.79U mg/Kg
SL-518-NBZ-SB-0.0-0.5(REA)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-519-NBZ-SB-0.0-0.5(REA)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-520-NBZ-SB-0.0-0.5(REA)	TIN	2.44 mg/Kg	2.44U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

3/3/2014 11:35:45 AM

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## Method Blank Outlier Report

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

<b>Method: 6020A</b>				
<b>Matrix: SO</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35437AB220009A	1/4/2014 12:09:00 AM	STRONTIUM	0.111 mg/Kg	SL-517-NBZ-SB-0.0-0.5 SL-517-NBZ-SB-2.0-3.0 SL-518-NBZ-SB-0.0-0.5 SL-519-NBZ-SB-0.0-0.5 SL-520-NBZ-SB-0.0-0.5

<b>Method: 8270D SIM</b>				
<b>Matrix: AQ</b>				
Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWH35B261005	12/22/2013 10:05:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate Di-n-butylphthalate	0.53 ug/L 0.18 ug/L 0.16 ug/L	EB2-121613

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB2-121613(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	2.2 ug/L	2.2U ug/L
EB2-121613(RES)	Diethylphthalate	0.35 ug/L	1.1U ug/L
EB2-121613(RES)	Di-n-butylphthalate	0.23 ug/L	1.1U ug/L



# Field Blank Outlier Report

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041613(REA2/TOT)	4/16/2013 3:15:00 PM	MOLYBDENUM TIN	0.0132 mg/L 0.0029 mg/L	SL-517-NBZ-SB-0.0-0.5 SL-517-NBZ-SB-2.0-3.0 SL-518-NBZ-SB-0.0-0.5 SL-519-NBZ-SB-0.0-0.5 SL-520-NBZ-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-517-NBZ-SB-0.0-0.5(REA)	MOLYBDENUM	0.230 mg/Kg	0.230U mg/Kg
SL-518-NBZ-SB-0.0-0.5(REA)	MOLYBDENUM	0.256 mg/Kg	0.256U mg/Kg
SL-519-NBZ-SB-0.0-0.5(REA)	MOLYBDENUM	0.226 mg/Kg	0.226U mg/Kg
SL-520-NBZ-SB-0.0-0.5(REA)	MOLYBDENUM	0.259 mg/Kg	0.259U mg/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

3/3/2014 12:17:30 PM

ADR version 1.7.0.207

Page 1 of 1



## Surrogate Outlier Report

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 8270D SIM

**Matrix:** SO

<i>Sample ID (Analysis Type)</i>	<i>Surrogate</i>	<i>Sample % Recovery</i>	<i>% Recovery Limits</i>	<i>Affected Compounds</i>	<i>Flag</i>
SL-520-NBZ-SB- 0.0-0.5	Benzo(a)pyrene-d12	58	59.00-125.00	No Affected Compounds	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 1613B

**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB2-121613	1,2,3,4,6,7,8-HPCDD	JB	0.943	10.0	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.721	10.0	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.388	10.0	PQL	pg/L	
	1,2,3,7,8,9-HxCDD	JBQ	0.456	10.0	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	0.581	10.0	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.658	10.0	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.331	10.0	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.493	10.0	PQL	pg/L	
	2,3,7,8-TCDF	JBQ	0.772	2.00	PQL	pg/L	
	OCDD	JBQ	2.16	20.0	PQL	pg/L	
	OCDF	JBQ	1.24	20.0	PQL	pg/L	

**Method:** 8270D SIM

**Matrix:** AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB2-121613	Diethylphthalate	J	0.35	1.1	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.23	1.1	PQL	ug/L	
	Di-n-octylphthalate	J	0.060	1.1	PQL	ug/L	

**Method:** 1613B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	0.913	5.07	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.310	5.07	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.132	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.110	5.07	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.222	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.166	5.07	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.199	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.191	5.07	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.234	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.318	5.07	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.408	5.07	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.155	5.07	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.369	5.07	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0989	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.147	1.01	PQL	ng/Kg	
	OCDD	JB	6.05	10.1	PQL	ng/Kg	
	OCDF	JB	0.643	10.1	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-NBZ-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.0841	5.28	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0717	5.28	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0429	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0457	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0513	5.28	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.0364	5.28	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.0436	5.28	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0539	5.28	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0587	5.28	PQL	ng/Kg	
	1,2,3,7,8-PCDD	JB	0.0440	5.28	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JBQ	0.0726	5.28	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0254	5.28	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JB	0.0428	5.28	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0455	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0363	1.06	PQL	ng/Kg	
	OCDD	JB	0.516	10.6	PQL	ng/Kg	
	OCDF	JBQ	0.146	10.6	PQL	ng/Kg	
SL-518-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.12	5.18	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.605	5.18	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.135	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0699	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.155	5.18	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.259	5.18	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.165	5.18	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.297	5.18	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.154	5.18	PQL	ng/Kg	
	1,2,3,7,8-PCDD	JBQ	0.0876	5.18	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JB	0.142	5.18	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.158	5.18	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JB	0.380	5.18	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.151	1.04	PQL	ng/Kg	
	OCDF	JB	0.950	10.4	PQL	ng/Kg	
SL-519-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.45	5.13	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.364	5.13	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0896	5.13	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0614	5.13	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0821	5.13	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.191	5.13	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.112	5.13	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.258	5.13	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.174	5.13	PQL	ng/Kg	
	1,2,3,7,8-PCDF	JBQ	0.128	5.13	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0664	5.13	PQL	ng/Kg	
	2,3,4,7,8-PCDF	JBQ	0.188	5.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0786	1.03	PQL	ng/Kg	
	OCDD	JB	10.0	10.3	PQL	ng/Kg	
	OCDF	JB	0.824	10.3	PQL	ng/Kg	



# Reporting Limit Outliers

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-520-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.27	4.99	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.342	4.99	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0671	4.99	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0646	4.99	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JBQ	0.0827	4.99	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.355	4.99	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JBQ	0.131	4.99	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.578	4.99	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JB	0.0645	4.99	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0334	4.99	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.210	4.99	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.110	4.99	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.176	4.99	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.102	0.997	PQL	ng/Kg	
	OCDD	JB	9.90	9.97	PQL	ng/Kg	
	OCDF	JBQ	0.593	9.97	PQL	ng/Kg	

Method: 6010C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-NBZ-SB-0.0-0.5	ANTIMONY	J	2.22	4.13	PQL	mg/Kg	J (all detects)
	BORON	J	9.81	10.3	PQL	mg/Kg	
	MOLYBDENUM	J	0.230	2.06	PQL	mg/Kg	
	SODIUM	J	97.6	103	PQL	mg/Kg	
	TIN	J	4.06	10.3	PQL	mg/Kg	
	Zirconium	J	4.64	5.16	PQL	mg/Kg	
SL-517-NBZ-SB-2.0-3.0	ANTIMONY	J	2.25	4.23	PQL	mg/Kg	J (all detects)
	BORON	J	7.71	10.6	PQL	mg/Kg	
	TIN	J	3.79	10.6	PQL	mg/Kg	
	Zirconium	J	4.14	5.28	PQL	mg/Kg	
SL-518-NBZ-SB-0.0-0.5	ANTIMONY	J	1.73	4.02	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.675	1.01	PQL	mg/Kg	
	BORON	J	6.14	10.1	PQL	mg/Kg	
	MOLYBDENUM	J	0.256	2.01	PQL	mg/Kg	
	SODIUM	J	60.7	101	PQL	mg/Kg	
	TIN	J	3.05	10.1	PQL	mg/Kg	
SL-519-NBZ-SB-0.0-0.5	Zirconium	J	2.88	5.03	PQL	mg/Kg	J (all detects)
	ANTIMONY	J	1.46	3.92	PQL	mg/Kg	
	BERYLLIUM	J	0.579	0.980	PQL	mg/Kg	
	BORON	J	5.54	9.80	PQL	mg/Kg	
	MOLYBDENUM	J	0.226	1.96	PQL	mg/Kg	
	SODIUM	J	71.2	98.0	PQL	mg/Kg	
SL-520-NBZ-SB-0.0-0.5	TIN	J	2.57	9.80	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.03	4.90	PQL	mg/Kg	
	ANTIMONY	J	1.15	3.98	PQL	mg/Kg	
	BERYLLIUM	J	0.393	0.995	PQL	mg/Kg	
	BORON	J	5.50	9.95	PQL	mg/Kg	
	MOLYBDENUM	J	0.259	1.99	PQL	mg/Kg	
	SODIUM	J	58.3	99.5	PQL	mg/Kg	
	TIN	J	2.44	9.95	PQL	mg/Kg	
	Zirconium	J	1.80	4.98	PQL	mg/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-NBZ-SB-0.0-0.5	SELENIUM	J	0.312	0.413	PQL	mg/Kg	J (all detects)
		J	0.106	0.206	PQL	mg/Kg	
SL-517-NBZ-SB-2.0-3.0	SELENIUM	J	0.305	0.423	PQL	mg/Kg	J (all detects)
		J	0.0914	0.211	PQL	mg/Kg	
SL-518-NBZ-SB-0.0-0.5	SELENIUM	J	0.227	0.402	PQL	mg/Kg	J (all detects)
		J	0.0584	0.201	PQL	mg/Kg	
SL-519-NBZ-SB-0.0-0.5	SELENIUM	J	0.181	0.392	PQL	mg/Kg	J (all detects)
		J	0.0429	0.196	PQL	mg/Kg	
SL-520-NBZ-SB-0.0-0.5	SELENIUM	J	0.153	0.398	PQL	mg/Kg	J (all detects)

**Method:** 7471B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-NBZ-SB-2.0-3.0	MERCURY	J	0.0144	0.0168	PQL	mg/Kg	J (all detects)
SL-518-NBZ-SB-0.0-0.5	MERCURY	J	0.0126	0.0172	PQL	mg/Kg	J (all detects)

**Method:** 8015M

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.1	5.2	PQL	mg/Kg	J (all detects)
SL-517-NBZ-SB-2.0-3.0	EFH (C21-C30)	J	5.0	5.3	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	9.3	11	PQL	mg/Kg	
SL-518-NBZ-SB-0.0-0.5	EFH (C8-C11)	J	14	26	PQL	mg/Kg	J (all detects)
SL-519-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.8	5.1	PQL	mg/Kg	J (all detects)
SL-520-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.1	5.0	PQL	mg/Kg	J (all detects)

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-517-NBZ-SB-0.0-0.5	2-METHYLNAPHTHALENE	J	0.99	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.0	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.7	PQL	ug/Kg	
	PYRENE	J	1.1	1.7	PQL	ug/Kg	
SL-517-NBZ-SB-2.0-3.0	CHRYSENE	J	0.44	1.7	PQL	ug/Kg	J (all detects)
SL-518-NBZ-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	13	18	PQL	ug/Kg	
	CHRYSENE	J	1.0	1.7	PQL	ug/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH155

Laboratory: LL

EDD Filename: PH155\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-519-NBZ-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.97	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.0	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.70	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.82	1.7	PQL	ug/Kg	
	PYRENE	J	0.68	1.7	PQL	ug/Kg	
SL-520-NBZ-SB-0.0-0.5	BENZO(A)PYRENE	J	0.68	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.95	1.7	PQL	ug/Kg	
	PYRENE	J	1.3	1.7	PQL	ug/Kg	



LDC #: 31275A4

## VALIDATION COMPLETENESS WORKSHEET

Date: 2/10/17

SDG #: PH155

ADR

Page: 1 of 1

Laboratory: Eurofins Lancaster Laboratories

Reviewer: [Signature]

2nd Reviewer: [Signature]

**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: 12/16/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	MS/D (from SDG: PH148 (LOC 3254E))
VII.	Duplicate Sample Analysis	N	DW ↓
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	ICP Serial Dilution	A	
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	N	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	SW	*E TB = 6 FB = FB-041613 (PH032)

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

\* ND = No compounds detected  
R = Rinsate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples:

Soil/water

1	SL-517-NBZ-SB-0.0-0.5	11		21		31	
2	SL-517-NBZ-SB-2.0-3.0	12		22		32	
3	SL-518-NBZ-SB-0.0-0.5	13		23		33	
4	SL-519-NBZ-SB-0.0-0.5	14		24		34	
5	SL-520-NBZ-SB-0.0-0.5	15		25		35	
6	EB2-121613 w	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: \_\_\_\_\_



# VALIDATION FINDINGS WORKSHEET Field Blanks

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

Blank units: mg/L Associated sample units: mg/Kg

Reason: F

Sampling date: 4/16/13 Soil factor applied 100x

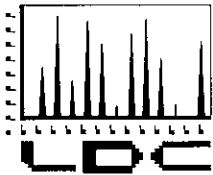
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification											
	FB-041613 (SDG: PH032)	Action Limit	1	3	4	5							
Mo	0.0132	6.60	0.230	0.256 0.26	0.226 0.23	0.259 0.26							
Sn	0.0029	1.45											

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".





**LABORATORY DATA CONSULTANTS, INC.**  
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

CDM  
555 17th Street, Suite 1100  
Denver, CO 80202  
ATTN: Mrs. Cherie Zakowski

March 4, 2014

SUBJECT: Santa Susana Field Laboratory, Subarea NBZ Data Validation

Dear Mrs. Zakowski,

Enclosed is the final validation report for the fractions listed below. This SDG was received on February 7, 2014. Attachment 1 is a summary of the samples that were reviewed for each analysis.

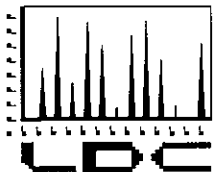
**LDC Project # 31306:**

<b><u>SDG #</u></b>	<b><u>Fraction</u></b>
PH141	Semivolatiles, Pesticides, Metals, Total Petroleum Hydrocarbons as Gasoline, Total Petroleum Hydrocarbons as Extractables, Dioxins/Dibenzofurans, Herbicides

The data validation was performed under Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Quality Assurance Project Plan for Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit, March 2009, Revision 4
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2010
- Polychlorinated Dioxins/Dibenzofurans Data Review, September 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007





Please feel free to contact us if you have any questions.

Sincerely,

Shauna McKellar  
Project Manager/Chemist



90/10 ADR/IV LDC #31306 (CDM Federal Programs-Chantilly VA / Santa Susana Field Laboratory, Subarea NBZ)

[illegible]



**Data Validation Report**  
**Santa Susana Field Laboratory**  
**Subarea NBZ**

**SDG: PH141**

Prepared for

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March 3, 2014



## INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected on December 6, 2013. Data validation was performed in accordance with the Quality Assurance Project Plan (QAPP) for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4), a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFGs) for Superfund Organic Methods Data Review (June 2008), Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) and for Inorganic Data Review (January 2010). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following methods:

Semivolatiles (SVOCs) by Environmental Protection Agency (EPA) SW 846 Method 8270D utilizing Selective Ion Monitoring (SIM)  
Pesticides by EPA SW 846 Method 8081B  
Metals by EPA SW 846 Method 6010C, 6020A and 7471B  
Herbicides by EPA SW 846 Method 8151A  
Total Petroleum Hydrocarbons (TPH) as Gasoline by EPA SW 846 Method 8015M  
TPH as Extractables by EPA SW 846 Method 8015M  
Dioxins and Dibenzofurans by EPA Method 1613B

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibration blanks (ICB/CCBs), surrogates, internal standards (dioxins only), laboratory control sample/laboratory control sample duplicates (LCS/LCSD), method blanks, trip blanks, equipment blanks and field blanks. No samples in this SDG were subjected to Level IV evaluation.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of ICB/CCBs, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.



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.



## 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 QC criteria.

## II. Initial Calibration

Initial Calibration data were not reviewed for level III.

## III. Continuing Calibration

Continuing calibration data were not reviewed for level III.

## IV. Blanks

Method blanks were performed at the required frequencies. No contaminant concentrations were detected in the method or preparation blanks with the exception of two blanks for metals and dioxins. The associated sample results were qualified as non-detected (U) due to method blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the associated blanks were not qualified. The details regarding the qualification of data are provided in Enclosure I.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the following exceptions:

SDG/ Method	Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PH141/ 6010C	ICB/CCB	Molybdenum	2.9 ug/L	All samples in PH141

Sample concentrations were compared to concentrations detected in the initial and continuing blanks. The sample concentrations were not detected or were significantly greater than the concentrations found in the associated blanks with the following exceptions:

SDG/ Method	Sample	Compound	Reported Concentration	Modified Final Concentration
PH141/ 6010C	SL-501-NBZ-SB-0.0-0.5	Molybdenum	0.197 mg/Kg	0.197U mg/Kg

## V. Surrogate Spikes

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



## **VI. ICP Interference Check Sample (ICS) Analysis**

ICP interference check data were not reviewed for level III.

## **VII. Matrix Spike/Matrix Spike Duplicates**

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

## **VIII. Laboratory Duplicates Sample**

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

## **IX. Laboratory Control Samples (LCS)**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one LCS/LCSD pair for herbicides. No data were qualified due to high %Rs since the associated results were non-detected.

## **X. Internal Standards**

Internal standards were reviewed for dioxins. Percent recoveries (%R) were within QC limits.

## **XI. ICP Serial Dilution**

ICP serial dilution was not performed for this SDG.

## **XII. Compound Quantitation**

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the RL as detected were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG PH141	All compounds reported as detected below the RL.	J (all detects)	A

## **XIII. Field Duplicate Samples**

No field duplicates were identified in this SDG.

## **XIV. Field Blank Samples**

One trip blank was collected and analyzed for TPH as gasoline. No volatile contaminants were found in the trip blank.



Two equipment blanks (from SDG PH140) were collected and analyzed for SVOCs, pesticides, metals, herbicides, TPH as extractables and dioxins. The equipment blanks had detections for SVOCs, metals and dioxins. The sample results were not detected or were significantly greater than the concentrations found in the equipment blanks, therefore no data were qualified.

One field blank (from SDG PH032) was collected and analyzed for SVOCs, pesticides, metals, herbicides, TPH as extractables and dioxins. The field blank had detections for SVOCs, metals and dioxins. The associated sample results were qualified as non-detected (U) due to field blank contamination as applicable. The sample results that were not detected or were significantly greater than the concentrations found in the field blank were not qualified. The field blank outlier reports are presented in Enclosure I.

## **XV. Overall Assessment of Data**

The overall assessment of QA/QC data review by automated and manual validation of this sampling event met project requirements and analytical completeness levels with the exceptions noted in the above sections. The remainder of the data are deemed useable for the intended use.

Data flags are summarized and are presented as Attachment 2.



**Attachment 1**

**Sample Cross Reference**



## Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Dec-2013	TB-120613	7305599	TB	5030B	8015M	III
06-Dec-2013	SL-534-NBZ-SB-0.0-0.5	7305592	N	3546	8015M	III
06-Dec-2013	SL-512-NBZ-SB-0.0-0.5	7305591	N	3050B	6010C	III
06-Dec-2013	SL-512-NBZ-SB-0.0-0.5	7305591	N	3050B	6020A	III
06-Dec-2013	SL-512-NBZ-SB-0.0-0.5	7305591	N	3546	8015M	III
06-Dec-2013	SL-512-NBZ-SB-0.0-0.5	7305591	N	3546	8270D SIM	III
06-Dec-2013	SL-512-NBZ-SB-0.0-0.5	7305591	N	METHOD	1613B	III
06-Dec-2013	SL-512-NBZ-SB-0.0-0.5	7305591	N	METHOD	7471B	III
06-Dec-2013	SL-535-NBZ-SB-0.0-0.5	7305593	N	3546	8015M	III
06-Dec-2013	SL-501-NBZ-SB-0.0-0.5	7305594	N	3050B	6010C	III
06-Dec-2013	SL-501-NBZ-SB-0.0-0.5	7305594	N	3050B	6020A	III
06-Dec-2013	SL-501-NBZ-SB-0.0-0.5	7305594	N	METHOD	7471B	III
06-Dec-2013	SL-537-NBZ-SB-0.0-0.5	7305595	N	3546	8015M	III
06-Dec-2013	SL-537-NBZ-SB-0.0-0.5	7305595	N	3546	8081B	III
06-Dec-2013	SL-537-NBZ-SB-0.0-0.5	7305595	N	METHOD	1613B	III
06-Dec-2013	SL-556-NBZ-SB-0.0-0.5	7305597	N	3546	8015M	III
06-Dec-2013	SL-556-NBZ-SB-0.0-0.5	7305597	N	3546	8081B	III
06-Dec-2013	SL-556-NBZ-SB-0.0-0.5	7305597	N	3550B	8151A	III
06-Dec-2013	SL-538-NBZ-SB-0.0-0.5	7305596	N	3546	8015M	III
06-Dec-2013	SL-538-NBZ-SB-0.0-0.5	7305596	N	3546	8081B	III
06-Dec-2013	SL-538-NBZ-SB-0.0-0.5	7305596	N	3546	8270D SIM	III
06-Dec-2013	SL-538-NBZ-SB-0.0-0.5	7305596	N	METHOD	1613B	III
06-Dec-2013	SL-556-NBZ-SB-4.0-5.0	7305598	N	3546	8015M	III
06-Dec-2013	SL-556-NBZ-SB-4.0-5.0	7305598	N	3546	8081B	III
06-Dec-2013	SL-556-NBZ-SB-4.0-5.0	7305598	N	3550B	8151A	III
06-Dec-2013	SL-556-NBZ-SB-4.0-5.0	7305598	N	5035A	8015M	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 2**  
**Overall Data Qualification Summary**



# Data Qualifier Summary

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** METALS

**Method:** 6010C

**Matrix:** SO

Sample ID: SL-501-NBZ-SB-0.0-0.5

Collected: 12/6/2013 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
ARSENIC	3.19	J	0.691	MDL	3.95	PQL	mg/Kg	J	Z
BERYLLIUM	0.496	J	0.0661	MDL	0.987	PQL	mg/Kg	J	Z
CADMIUM	0.425	J	0.0750	MDL	0.987	PQL	mg/Kg	J	Z
SODIUM	84.2	J	16.5	MDL	98.7	PQL	mg/Kg	J	Z
TIN	2.70	J	0.217	MDL	9.87	PQL	mg/Kg	U	B
Zirconium	0.897	J	0.829	MDL	4.93	PQL	mg/Kg	J	Z
MOLYBDENUM	0.197	J	0.168	MDL	1.97	PQL	mg/Kg	U	B, F

Sample ID: SL-512-NBZ-SB-0.0-0.5

Collected: 12/6/2013 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
BERYLLIUM	0.514	J	0.0664	MDL	0.991	PQL	mg/Kg	J	Z
CADMIUM	0.372	J	0.0753	MDL	0.991	PQL	mg/Kg	J	Z
COPPER	1.74	J	0.287	MDL	1.98	PQL	mg/Kg	J	Z
SODIUM	64.2	J	16.5	MDL	99.1	PQL	mg/Kg	J	Z
TIN	2.71	J	0.218	MDL	9.91	PQL	mg/Kg	U	B
Zirconium	1.48	J	0.832	MDL	4.95	PQL	mg/Kg	J	Z

**Method Category:** METALS

**Method:** 6020A

**Matrix:** SO

Sample ID: SL-501-NBZ-SB-0.0-0.5

Collected: 12/6/2013 12:50:00

Analysis Type: REA

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.0987	MDL	0.395	PQL	mg/Kg	J	Z

Sample ID: SL-501-NBZ-SB-0.0-0.5

Collected: 12/6/2013 12:50:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0322	J	0.0257	MDL	0.197	PQL	mg/Kg	J	Z

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category: METALS**

**Method: 7471B**

**Matrix: SO**

Sample ID: SL-501-NBZ-SB-0.0-0.5

Collected: 12/6/2013 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
MERCURY	0.0129	J	0.0099	MDL	0.0166	PQL	mg/Kg	J	Z

**Method Category: SVOA**

**Method: 1613B**

**Matrix: SO**

Sample ID: SL-512-NBZ-SB-0.0-0.5

Collected: 12/6/2013 9:25:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.13	JB	0.0299	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.282	JB	0.0160	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0494	JBQ	0.0217	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0452	JBQ	0.0280	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDF	0.0570	JB	0.0239	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDD	0.0917	JBQ	0.0294	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,6,7,8-HxCDF	0.0490	JB	0.0237	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDD	0.0856	JBQ	0.0268	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,7,8,9-HxCDF	0.0616	JBQ	0.0232	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0420	JBQ	0.0294	MDL	5.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0868	JB	0.0202	MDL	5.00	PQL	ng/Kg	U	B
2,3,4,6,7,8-HxCDF	0.0502	JB	0.0223	MDL	5.00	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0828	JBQ	0.0198	MDL	5.00	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0559	JBQ	0.0439	MDL	0.999	PQL	ng/Kg	U	B
OCDD	8.50	JB	0.0279	MDL	9.99	PQL	ng/Kg	J	Z
OCDF	0.669	JB	0.0339	MDL	9.99	PQL	ng/Kg	U	B

Sample ID: SL-537-NBZ-SB-0.0-0.5

Collected: 12/6/2013 12:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.71	JB	0.0582	MDL	4.98	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.633	JB	0.0379	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0524	JBQ	0.0468	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0843	JB	0.0516	MDL	4.98	PQL	ng/Kg	U	B

\* denotes a non-reportable result

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# Data Qualifier Summary

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 1613B

**Matrix:** SO

Sample ID: SL-537-NBZ-SB-0.0-0.5

Collected: 12/6/2013 12:55:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.161	JB	0.0536	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.272	JB	0.0541	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.182	JB	0.0514	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.228	JBQ	0.0504	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0541	JBQ	0.0518	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.143	JBQ	0.0548	MDL	4.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.190	JB	0.0500	MDL	4.98	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.181	JB	0.0491	MDL	4.98	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.405	JB	0.0473	MDL	4.98	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0995	JBQ	0.0792	MDL	0.996	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.194	JBQ	0.0894	MDL	0.996	PQL	ng/Kg	U	B
OCDF	1.35	JB	0.0730	MDL	9.96	PQL	ng/Kg	U	B

Sample ID: SL-538-NBZ-SB-0.0-0.5

Collected: 12/6/2013 2:05:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.929	JB	0.0434	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.270	JB	0.0212	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0407	JBQ	0.0284	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0417	JBQ	0.0311	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0688	JB	0.0354	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.102	JBQ	0.0321	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0572	JB	0.0334	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0911	JB	0.0305	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.102	JBQ	0.0366	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0529	JBQ	0.0382	MDL	4.86	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.107	JBQ	0.0277	MDL	4.86	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0814	JBQ	0.0326	MDL	4.86	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.149	JBQ	0.0274	MDL	4.86	PQL	ng/Kg	U	B
OCDD	6.81	JB	0.0394	MDL	9.72	PQL	ng/Kg	J	Z
OCDF	0.626	JB	0.0629	MDL	9.72	PQL	ng/Kg	U	B

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Data Qualifier Summary

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8015M

**Matrix:** SO

Sample ID: SL-512-NBZ-SB-0.0-0.5

Collected: 12/6/2013 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
EFH (C15-C20)	2.4	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

Sample ID: SL-534-NBZ-SB-0.0-0.5

Collected: 12/6/2013 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 (C15-C20)	2.5	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

Sample ID: SL-537-NBZ-SB-0.0-0.5

Collected: 12/6/2013 12:55:00

Analysis Type: RES

Dilution: 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	8.1	J	4.1	MDL	10	PQL	mg/Kg	J	Z

Sample ID: SL-538-NBZ-SB-0.0-0.5

Collected: 12/6/2013 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 (C15-C20)	2.2	J	2.0	MDL	5.1	PQL	mg/Kg	J	Z

**Method Category:** SVOA

**Method:** 8081B

**Matrix:** SO

Sample ID: SL-537-NBZ-SB-0.0-0.5

Collected: 12/6/2013 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
4,4'-DDE	0.89	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z
4,4'-DDT	0.86	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-556-NBZ-SB-0.0-0.5

Collected: 12/6/2013 2:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.40	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method Category:** SVOA

**Method:** 8151A

**Matrix:** SO

Sample ID: SL-556-NBZ-SB-0.0-0.5

Collected: 12/6/2013 2:00:00

Analysis Type: RES

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.97	J	0.77	MDL	1.7	PQL	ug/Kg	J	Z

**Method Category:** SVOA

**Method:** 8270D SIM

**Matrix:** SO

Sample ID: SL-512-NBZ-SB-0.0-0.5

Collected: 12/6/2013 9:25:00

Analysis Type: RES-BASE/NEUTRAL

Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.88	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.68	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.77	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.74	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-538-NBZ-SB-0.0-0.5

Collected: 12/6/2013 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	0.78	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.71	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.72	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.88	J	0.67	MDL	1.7	PQL	ug/Kg	J	Z

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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## Data Qualifier Summary

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

### Reason Code Legend

<i>Reason Code</i>	<i>Description</i>
B	Calibration Blank Contamination
B	Method Blank Contamination
F	Field Blank Contamination
L	Laboratory Control Spike Upper Estimation
Z	Reporting Limit Trace Value

\* denotes a non-reportable result

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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**Enclosure I**

**EPA Level III ADR Outliers**

**(Including Manual Review Outliers)**



# Quality Control Outlier Reports

PH141



# Method Blank Outlier Report

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK3470B371822	12/16/2013 6:22:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HxCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	0.255 ng/Kg 0.219 ng/Kg 0.237 ng/Kg 0.164 ng/Kg 0.187 ng/Kg 0.174 ng/Kg 0.183 ng/Kg 0.220 ng/Kg 0.333 ng/Kg 0.186 ng/Kg 0.219 ng/Kg 0.271 ng/Kg 0.287 ng/Kg 0.0842 ng/Kg 0.0670 ng/Kg 0.606 ng/Kg 0.588 ng/Kg	SL-512-NBZ-SB-0.0-0.5 SL-537-NBZ-SB-0.0-0.5 SL-538-NBZ-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-512-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	1.13 ng/Kg	1.13U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.282 ng/Kg	0.282U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0494 ng/Kg	0.0494U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0452 ng/Kg	0.0452U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.0570 ng/Kg	0.0570U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.0917 ng/Kg	0.0917U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.0490 ng/Kg	0.0490U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.0856 ng/Kg	0.0856U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.0616 ng/Kg	0.0616U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0420 ng/Kg	0.0420U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0868 ng/Kg	0.0868U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.0502 ng/Kg	0.0502U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0828 ng/Kg	0.0828U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.0559 ng/Kg	0.0559U ng/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	OCDF	0.669 ng/Kg	0.669U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.633 ng/Kg	0.633U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0524 ng/Kg	0.0524U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0843 ng/Kg	0.0843U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.161 ng/Kg	0.161U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.272 ng/Kg	0.272U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.182 ng/Kg	0.182U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.228 ng/Kg	0.228U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.0541 ng/Kg	0.0541U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.143 ng/Kg	0.143U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.190 ng/Kg	0.190U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.181 ng/Kg	0.181U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.405 ng/Kg	0.405U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDD	0.0995 ng/Kg	0.0995U ng/Kg

Project Name and Number: 1204-002-001-AL - SSFL Area IV Phase 3

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# Method Blank Outlier Report

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
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The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-537-NBZ-SB-0.0-0.5(RES)	2,3,7,8-TCDF	0.194 ng/Kg	0.194U ng/Kg
SL-537-NBZ-SB-0.0-0.5(RES)	OCDF	1.35 ng/Kg	1.35U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	0.929 ng/Kg	0.929U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.270 ng/Kg	0.270U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0407 ng/Kg	0.0407U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0417 ng/Kg	0.0417U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,4,7,8-HxCDF	0.0688 ng/Kg	0.0688U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDD	0.102 ng/Kg	0.102U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,6,7,8-HxCDF	0.0572 ng/Kg	0.0572U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDD	0.0911 ng/Kg	0.0911U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8,9-HxCDF	0.102 ng/Kg	0.102U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0529 ng/Kg	0.0529U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.107 ng/Kg	0.107U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	2,3,4,6,7,8-HxCDF	0.0814 ng/Kg	0.0814U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.149 ng/Kg	0.149U ng/Kg
SL-538-NBZ-SB-0.0-0.5(RES)	OCDF	0.626 ng/Kg	0.626U ng/Kg

Method: 6010C

Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34737AB221738	12/16/2013 5:38:00 PM	CALCIUM MAGNESIUM TIN ZINC	4.84 mg/Kg 2.30 mg/Kg 1.63 mg/Kg 0.233 mg/Kg	SL-501-NBZ-SB-0.0-0.5 SL-512-NBZ-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-501-NBZ-SB-0.0-0.5(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-512-NBZ-SB-0.0-0.5(RES)	TIN	2.71 mg/Kg	2.71U mg/Kg



# Field Blank Outlier Report

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 6010C

Matrix: SO

Field Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
FB-041613(REA2/TOT)	4/16/2013 3:15:00 PM	MOLYBDENUM TIN	0.0132 mg/L 0.0029 mg/L	SL-501-NBZ-SB-0.0-0.5 SL-512-NBZ-SB-0.0-0.5 SL-534-NBZ-SB-0.0-0.5 SL-535-NBZ-SB-0.0-0.5 SL-537-NBZ-SB-0.0-0.5 SL-538-NBZ-SB-0.0-0.5 SL-556-NBZ-SB-0.0-0.5 SL-556-NBZ-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-501-NBZ-SB-0.0-0.5(RES)	MOLYBDENUM	0.197 mg/Kg	0.197U mg/Kg



# Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method: 8151A**

**Matrix: SO**

<i>QC Sample ID (Associated Samples)</i>	<i>Compound</i>	<i>LCS %R</i>	<i>LCSD %R</i>	<i>%R Limits</i>	<i>RPD (Limits)</i>	<i>Affected Compounds</i>	<i>Flag</i>
P33454AQ242143A (SL-556-NBZ-SB-0.0-0.5 SL-556-NBZ-SB-4.0-5.0)	2,4-D 2,4-DB	136 135	- -	59.00-122.00 54.00-131.00	- -	2,4-D 2,4-DB	J (all detects)



# Reporting Limit Outliers

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-512-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.13	5.00	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.282	5.00	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0494	5.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0452	5.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.0570	5.00	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.0917	5.00	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.0490	5.00	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.0856	5.00	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0616	5.00	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0420	5.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0868	5.00	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.0502	5.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0828	5.00	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0559	0.999	PQL	ng/Kg	
	OCDD	JB	8.50	9.99	PQL	ng/Kg	
	OCDF	JB	0.669	9.99	PQL	ng/Kg	
SL-537-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.71	4.98	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.633	4.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0524	4.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0843	4.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.161	4.98	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JB	0.272	4.98	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.182	4.98	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JBQ	0.228	4.98	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.0541	4.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.143	4.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.190	4.98	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JB	0.181	4.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.405	4.98	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0995	0.996	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.194	0.996	PQL	ng/Kg	
	OCDF	JB	1.35	9.96	PQL	ng/Kg	
SL-538-NBZ-SB-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	0.929	4.86	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.270	4.86	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0407	4.86	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0417	4.86	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDF	JB	0.0688	4.86	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDD	JBQ	0.102	4.86	PQL	ng/Kg	
	1,2,3,6,7,8-HxCDF	JB	0.0572	4.86	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDD	JB	0.0911	4.86	PQL	ng/Kg	
	1,2,3,7,8,9-HxCDF	JBQ	0.102	4.86	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0529	4.86	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.107	4.86	PQL	ng/Kg	
	2,3,4,6,7,8-HxCDF	JBQ	0.0814	4.86	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.149	4.86	PQL	ng/Kg	
	OCDD	JB	6.81	9.72	PQL	ng/Kg	
	OCDF	JB	0.626	9.72	PQL	ng/Kg	



## Reporting Limit Outliers

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 6010C

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-501-NBZ-SB-0.0-0.5	ARSENIC	J	3.19	3.95	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.496	0.987	PQL	mg/Kg	
	CADMIUM	J	0.425	0.987	PQL	mg/Kg	
	MOLYBDENUM	J	0.197	1.97	PQL	mg/Kg	
	SODIUM	J	84.2	98.7	PQL	mg/Kg	
	TIN	J	2.70	9.87	PQL	mg/Kg	
SL-512-NBZ-SB-0.0-0.5	Zirconium	J	0.897	4.93	PQL	mg/Kg	J (all detects)
	BERYLLIUM	J	0.514	0.991	PQL	mg/Kg	
	CADMIUM	J	0.372	0.991	PQL	mg/Kg	
	COPPER	J	1.74	1.98	PQL	mg/Kg	
	SODIUM	J	64.2	99.1	PQL	mg/Kg	
	TIN	J	2.71	9.91	PQL	mg/Kg	
	Zirconium	J	1.48	4.95	PQL	mg/Kg	

**Method:** 6020A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-501-NBZ-SB-0.0-0.5	SELENIUM	J	0.104	0.395	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0322	0.197	PQL	mg/Kg	

**Method:** 7471B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-501-NBZ-SB-0.0-0.5	MERCURY	J	0.0129	0.0166	PQL	mg/Kg	J (all detects)

**Method:** 8015M

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-512-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.4	5.1	PQL	mg/Kg	J (all detects)
SL-534-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.5	5.1	PQL	mg/Kg	J (all detects)
SL-537-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	8.1	10	PQL	mg/Kg	J (all detects)
SL-538-NBZ-SB-0.0-0.5	EFH (C15-C20)	J	2.2	5.1	PQL	mg/Kg	J (all detects)



## Reporting Limit Outliers

Lab Reporting Batch ID: PH141

Laboratory: LL

EDD Filename: PH141\_v1.

eQAPP Name: CDM\_SSFL\_140113\_Lan

**Method:** 8081B

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-537-NBZ-SB-0.0-0.5	4,4'-DDE	J	0.89	1.8	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.86	1.8	PQL	ug/Kg	
SL-556-NBZ-SB-0.0-0.5	ENDRIN ALDEHYDE	J	0.40	1.8	PQL	ug/Kg	J (all detects)

**Method:** 8151A

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-556-NBZ-SB-0.0-0.5	2,4,5-TP (Silvex)	J	0.97	1.7	PQL	ug/Kg	J (all detects)

**Method:** 8270D SIM

**Matrix:** SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-512-NBZ-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.88	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.68	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.77	1.7	PQL	ug/Kg	
	PYRENE	J	0.74	1.7	PQL	ug/Kg	
SL-538-NBZ-SB-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.78	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.71	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.72	1.7	PQL	ug/Kg	
	PYRENE	J	0.88	1.7	PQL	ug/Kg	



LDC #: 31306A4

## VALIDATION COMPLETENESS WORKSHEET

SDG #: PH141

ADR

Laboratory: Eurofins Lancaster Laboratories

Date: 2/6/14

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

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: 12/6/13
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	—	
VI.	Matrix Spike Analysis	N	CS
VII.	Duplicate Sample Analysis	N	CS
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	ICP Serial Dilution	N	
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	N	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	SW	EB=EB2-100513 FB=01/6/13 (PH140) (P+0352)

Note: A = Acceptable  
N = Not provided/applicable  
SW = See worksheet

\*ND = No compounds detected  
R = Rinstate  
FB = Field blank

D = Duplicate  
TB = Trip blank  
EB = Equipment blank

Validated Samples:

soil

1	SL-512-NBZ-SB-0.0-0.5	11		21		31	
2	SL-501-NBZ-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 #: 31306A4

## VALIDATION FINDINGS WORKSHEET

## PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

Soil preparation factor applied: 100

Sample Concentration units, unless otherwise noted: mg/Kg

Associated Samples: All (Reason: B)

					Sample Identification									
Analyte	Maximum PB <sup>a</sup> (mg/Kg)	Maximum PB <sup>a</sup> (µg/l)	Maximum ICB/CCB <sup>a</sup> (µg/l)	Action Level	2									
Mo			2.9	1.45	0.197 0.20									

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.



VALIDATION FINDINGS WORKSHEET  
Field Blanks

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

Blank units: mg/L Associated sample units: mg/Kg

Reason: F

Sampling date: 4/16/13 Soil factor applied 100xField blank type: (circle one) Field Blank / Rinsate / Other: \_\_\_\_\_ Associated Samples: All

Analyte	Blank ID	Sample Identification											
	FB-041613 (SDG: PH032)	Action Limit	2										
Mo	0.0132	6.60	<u>0.197</u> <del>0.20</del>										
Sn	0.0029	1.45											

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".



# **Appendix D**

## **Master Database Table**

(On CD)



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-62-2	VANADIUM (FUME OR DUST)	37.3		0.112	1.02	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-66-6	ZINC	81.4		0.203	4.06	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-67-7	ZIRCONIUM	2.17	J	0.843	5.08	mg/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-70-2	CALCIUM METAL	3940		4.08	20.3	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7723-14-0	PHOSPHORUS	577		0.518	10.2	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6020A	4/29/2013	PH035	4.4	2	7782-49-2	SELENIUM	0.129	J	0.102	0.406	mg/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6020A	4/29/2013	PH035	4.4	2	7440-22-4	SILVER	0.0715	J	0.0203	0.203	mg/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6020A	4/29/2013	PH035	4.4	2	7440-24-6	STRONTIUM	16.7	J	0.0345	0.406	mg/kg		J	Q	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6020A	4/29/2013	PH035	4.4	2	7440-28-0	THALLIUM	0.214		0.0305	0.203	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	7471B	4/26/2013	PH035	4.4	1	7439-97-6	MERCURY	0.0453		0.0103	0.0166	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8015M	4/26/2013	PH035	4.4	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8015M	4/26/2013	PH035	4.4	1	PHCC15C20	EFH (C15-C20)	3.5	J	2.1	5.2	mg/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8015M	4/26/2013	PH035	4.4	1	PHCC21C30	EFH (C21-C30)	28		2.1	5.2	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8015M	4/26/2013	PH035	4.4	1	PHCC30C40	EFH (C30-C40)	66	J	4.2	10	mg/kg		J	L	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8015M	4/26/2013	PH035	4.4	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	1024-57-3	HEPTACHLOR EPOXIDE	0.87	U	0.54	0.87	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	1031-07-8	ENDOSULFAN SULFATE	1.8	U	0.35	1.8	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-31-5	TIN	10	U	0.220	10.0	mg/kg	J	U	B	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-32-6	TITANIUM METAL POWDER	1150		0.170	1.00	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-36-0	ANTIMONY	4	UJ	0.500	4.00	mg/kg	U	UJ	Q	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-38-2	ARSENIC	4.78		0.330	4.00	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-39-3	BARIUM	80.7		0.0330	1.00	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-41-7	BERYLLIUM	0.522	J	0.0670	1.00	mg/kg	J	J	Z	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-42-8	BORON	10	U	0.830	10.0	mg/kg	J	U	B	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-43-9	CADMIUM	0.128	J	0.0330	1.00	mg/kg	J	J	Z	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-47-3	CHROMIUM	19.9		0.0880	3.00	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-48-4	COBALT	5.01		0.0900	1.00	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-50-8	COPPER	14		0.180	2.00	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-62-2	VANADIUM (FUME OR DUST)	38.3		0.110	1.00	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-66-6	ZINC	60.6		0.200	4.00	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-67-7	ZIRCONIUM	2.43	J	0.830	5.00	mg/kg	J	J	Z	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7440-70-2	CALCIUM METAL	3860		4.02	20.0	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6010C	4/28/2013	PH035	2	1	7723-14-0	PHOSPHORUS	426		0.510	10.0	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6020A	4/29/2013	PH035	2	2	7782-49-2	SELENIUM	0.4	U	0.100	0.400	mg/kg	U			1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6020A	4/29/2013	PH035	2	2	7440-22-4	SILVER	0.0306	J	0.0200	0.200	mg/kg	J			1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6020A	4/29/2013	PH035	2	2	7440-24-6	STRONTIUM	14.3	J	0.0340	0.400	mg/kg		J	Q	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	6020A	4/29/2013	PH035	2	2	7440-28-0	THALLIUM	0.205		0.0300	0.200	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	7471B	4/26/2013	PH035	2	1	7439-97-6	MERCURY	0.0237		0.0101	0.0162	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	8015M	4/26/2013	PH035	2	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	8015M	4/26/2013	PH035	2	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	8015M	4/26/2013	PH035	2	1	PHCC21C30	EFH (C21-C30)	10		2.0	5.1	mg/kg				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	8015M	4/26/2013	PH035	2	1	PHCC30C40	EFH (C30-C40)	21	J	4.1	10	mg/kg		J	L	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	8015M	4/26/2013	PH035	2	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785749.307	2		



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	8270D SIM	4/30/2013	PH035	2	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	9045M	4/22/2013	PH035	2	1	pH	PH	7.81		0.0100	0.0100	pH unit				1785749.307	268132.311	-118.70976	34.234724
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	160.3M	4/25/2013	PH037	2.5	1	MOIST	MOISTURE	2.5		0.10	0.10	%				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	1746-01-6	2,3,7,8-TCDD	0.999	U	0.0196	0.999	ng/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.187	J	0.0213	4.99	ng/kg	JB	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	3268-87-9	OCDD	39.4		0.0163	9.99	ng/kg	B			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	3.84	J	0.0188	4.99	ng/kg	JB	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	39001-02-0	OCDF	1.66	J	0.0189	9.99	ng/kg	JB	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.0741	J	0.0222	4.99	ng/kg	J	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.0631	J	0.0196	4.99	ng/kg	JQ	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0662	J	0.0189	0.999	ng/kg	JQ	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	4.99	U	0.0178	4.99	ng/kg	JBQ	U	B	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	57117-31-4	2,3,4,7,8-PECDF	0.0832	J	0.0121	4.99	ng/kg	JBQ	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	4.99	U	0.0122	4.99	ng/kg	JB	U	B	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	57117-44-9	1,2,3,6,7,8-HXCDF	4.99	U	0.0167	4.99	ng/kg	JBQ	U	B	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.196	J	0.0219	4.99	ng/kg	JQ	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	60851-34-5	2,3,4,6,7,8-HXCDF	4.99	U	0.0169	4.99	ng/kg	JB	U	B	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	0.796	J	0.0119	4.99	ng/kg	JB	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	70648-26-9	1,2,3,4,7,8-HXCDF	4.99	U	0.0180	4.99	ng/kg	JBQ	U	B	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	72918-21-9	1,2,3,7,8,9-HXCDF	4.99	U	0.0193	4.99	ng/kg	JBQ	U	B	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	1613B	5/2/2013	PH037	2.5	1	TCDD TEQ	TCDD TEQ	0.0985		0	0	ng/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7429-90-5	ALUMINUM (FUME OR DUST)	12900		7.83	40.6	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7439-89-6	IRON	20000		3.86	40.6	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7439-92-1	LEAD	5.65	J	0.477	3.05	mg/kg			E, Q	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7439-93-2	LITHIUM	21.7		0.56	4.1	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7439-95-4	MAGNESIUM	4600		1.76	10.2	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7439-96-5	MANGANESE	270		0.0843	1.02	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7439-98-7	MOLYBDENUM	2.03	U	0.173	2.03	mg/kg	J	U	F	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-02-0	NICKEL	8.79	J	0.112	2.03	mg/kg		J	A	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-09-7	POTASSIUM	2670	J	13.7	102	mg/kg	J	J	Q	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-23-5	SODIUM	102	U	17.0	102	mg/kg	J	U	F	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-31-5	TIN	10.2	U	0.223	10.2	mg/kg	J	U	B	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-32-6	TITANIUM METAL POWDER	1120		0.173	1.02	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-36-0	ANTIMONY	0.627	J	0.508	4.06	mg/kg	J	J	Q, Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-38-2	ARSENIC	4.66		0.335	4.06	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-39-3	BARIUM	70.4		0.0335	1.02	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-41-7	BERYLLIUM	0.556	J	0.0680	1.02	mg/kg	J	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-42-8	BORON	10.2	U	0.843	10.2	mg/kg	J	U	F	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-43-9	CADMIUM	0.152	J	0.0335	1.02	mg/kg	J	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-47-3	CHROMIUM	17.3		0.0894	3.05	mg/kg				1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-48-4	COBALT	4.43	J	0.0914	1.02	mg/kg		J	E	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	6010C	5/3/2013	PH037	2.5	1	7440-50-8	COPPER	10.9		0.183	2.03	mg/kg				1785610.132			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	1613B	5/2/2013	PH038	2.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	4.98	U	0.0137	4.98	ng/kg	JBQ	U	B	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	1613B	5/2/2013	PH038	2.6	1	TCDD TEQ	TCDD TEQ	0.0274		0	0	ng/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7429-90-5	ALUMINUM (FUME OR DUST)	12700		7.76	40.3	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7439-89-6	IRON	24700		3.82	40.3	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7439-92-1	LEAD	6.1	J	0.473	3.02	mg/kg		J	E, Q	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7439-93-2	LITHIUM	20.4		0.55	4.0	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7439-95-4	MAGNESIUM	6430		1.74	10.1	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7439-96-5	MANGANESE	330		0.0835	1.01	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7439-98-7	MOLYBDENUM	2.01	U	0.171	2.01	mg/kg	J	U	F	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-02-0	NICKEL	11.7	J	0.111	2.01	mg/kg		J	A	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-09-7	POTASSIUM	2130	J	13.6	101	mg/kg		J	Q	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-23-5	SODIUM	101	U	16.8	101	mg/kg	J	U	F	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-31-5	TIN	10.1	U	0.221	10.1	mg/kg	J	U	B	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-32-6	TITANIUM METAL POWDER	1310		0.171	1.01	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-36-0	ANTIMONY	0.903	J	0.503	4.03	mg/kg	J	J	Q, Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-38-2	ARSENIC	4.35		0.332	4.03	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-39-3	BARIUM	72.4		0.0332	1.01	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-41-7	BERYLLIUM	0.56	J	0.0674	1.01	mg/kg	J	J	Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-42-8	BORON	10.1	U	0.835	10.1	mg/kg		U	F	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-43-9	CADMIUM	0.181	J	0.0332	1.01	mg/kg	J	J	Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-47-3	CHROMIUM	23.4		0.0886	3.02	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-48-4	COBALT	6.6	J	0.0906	1.01	mg/kg		J	E	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-50-8	COPPER	15.4		0.181	2.01	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-62-2	VANADIUM (FUME OR DUST)	44.6		0.111	1.01	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-66-6	ZINC	57.5		0.201	4.03	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-67-7	ZIRCONIUM	2.3	J	0.835	5.03	mg/kg	J	J	Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7440-70-2	CALCIUM METAL	3850	J	4.05	20.1	mg/kg		J	E	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6010C	5/3/2013	PH038	2.6	1	7723-14-0	PHOSPHORUS	401	J	0.513	10.1	mg/kg		J	E, A	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6020A	5/6/2013	PH038	2.6	2	7440-22-4	SILVER	0.0256	J	0.0201	0.201	mg/kg	J	J	Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6020A	5/6/2013	PH038	2.6	2	7440-24-6	STRONTIUM	18.6		0.0342	0.403	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6020A	5/6/2013	PH038	2.6	2	7440-28-0	THALLIUM	0.364		0.0302	0.201	mg/kg				1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	6020A	5/6/2013	PH038	2.6	2	7782-49-2	SELENIUM	0.18	J	0.101	0.403	mg/kg	J	J	Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	7471B	5/3/2013	PH038	2.6	1	7439-97-6	MERCURY	0.0122	J	0.0102	0.0170	mg/kg	J	J	Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8015M	5/2/2013	PH038	2.6	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.1	5.1	mg/kg	U			1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8015M	5/2/2013	PH038	2.6	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.1	5.1	mg/kg	U			1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8015M	5/2/2013	PH038	2.6	1	PHCC21C30	EFH (C21-C30)	3	J	2.1	5.1	mg/kg	J	J	Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8015M	5/2/2013	PH038	2.6	1	PHCC30C40	EFH (C30-C40)	8.3	J	4.1	10	mg/kg	J	J	L, Z	1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8015M	5/2/2013	PH038	2.6	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.1	5.1	mg/kg	U			1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8082A	4/27/2013	PH038	2.6	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8082A	4/27/2013	PH038	2.6	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8082A	4/27/2013	PH038	2.6	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8082A	4/27/2013	PH038	2.6	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785424.475	268116.636	-118.71084	34.234675
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	8082A	4/27/2013	PH038	2.6	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U						



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	3268-87-9	OCDD	32.6		0.0149	10.1	ng/kg	B			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	4.89	J	0.0180	5.04	ng/kg	JB	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	39001-02-0	OCDF	1.07	J	0.0157	10.1	ng/kg	J			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.182	J	0.0248	5.04	ng/kg	JQ	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.117	J	0.0213	5.04	ng/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0747	J	0.0255	1.01	ng/kg	JQ	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.04	U	0.0222	5.04	ng/kg	JBQ		B	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	57117-31-4	2,3,4,6,7,8-PCDF	0.141	J	0.0112	5.04	ng/kg	JB	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.04	U	0.0120	5.04	ng/kg	JB	U	B	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.544	J	0.0163	5.04	ng/kg	JB	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.05	J	0.0263	5.04	ng/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.04	U	0.0167	5.04	ng/kg	JB	U	B	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	0.599	J	0.0175	5.04	ng/kg	JB	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.04	U	0.0176	5.04	ng/kg	JB	U	B	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.0871	J	0.0187	5.04	ng/kg	JB	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	1613B	5/2/2013	PH038	4.6	1	TCDD TEQ	TCDD TEQ	0.555		0	0	ng/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/3/2013	PH038	4.6	1	7429-90-5	ALUMINIUM (FUME OR DUST)	9390		7.85	40.7	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/3/2013	PH038	4.6	1	7439-96-5	MANGANESE	211		0.0845	1.02	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/3/2013	PH038	4.6	1	7439-98-7	MOLYBDENUM	2.04	U	0.173	2.04	mg/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/3/2013	PH038	4.6	1	7440-09-7	POTASSIUM	1850	J	13.7	102	mg/kg		J	Q	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/3/2013	PH038	4.6	1	7440-23-5	SODIUM	102	U	17.0	102	mg/kg	J	U	F	1785402.91	268055.868	-118.71091	34.234508
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	53494-70-5	ENDRIN KETONE	1.8	U	0.61	1.8	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	57-74-9	CHLORDANE	17	U	4.1	17	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	58-89-9	gamma-BHC (Lindane)	0.85	U	0.17	0.85	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	60-57-1	DIELDRIN	1.7	U	0.34	1.7	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	72-20-8	ENDRIN	1.7	U	0.34	1.7	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	72-43-5	Methoxychlor	6.8	U	1.7	6.8	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	72-54-8	4,4'-DDD	1.7	U	0.34	1.7	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	72-55-9	4,4'-DDE	0.8	J	0.34	1.7	ug/kg	J		Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	7421-93-4	ENDRIN ALDEHYDE	1.7	U	0.34	1.7	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	76-44-8	HEPTACHLOR	0.85	U	0.17	0.85	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	8001-35-2	Toxaphene	34	U	12	34	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8081B	4/24/2013	PH031	1.8	1	959-98-8	ENDOSULFAN I	0.85	U	0.22	0.85	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	11097-69-1	Aroclor 1254	6.7	J	4.4	17	ug/kg	J	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	11126-42-4	Aroclor 5460	17	J	10	33	ug/kg	J	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	8082A	4/23/2013	PH031	1.8	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785849.999	267997.949	-118.70943	34.234357



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.339	J	0.0460	1.03	ng/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.17	U	0.0304	5.17	ng/kg	JBQ	U	B	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	57117-31-4	2,3,4,7,8-PECDF	0.457	J	0.0245	5.17	ng/kg	JB	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.359	J	0.0249	5.17	ng/kg	JBQ	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.244	J	0.0270	5.17	ng/kg	JB	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.31	J	0.0361	5.17	ng/kg	JB	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.259	J	0.0282	5.17	ng/kg	JBQ	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	2.24	J	0.0165	5.17	ng/kg	JB	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.295	J	0.0312	5.17	ng/kg	JB	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.17	U	0.0325	5.17	ng/kg	JBQ	U	B	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	1613B	4/18/2013	PH031	3.6	1	TCDD TEQ	TCDD TEQ	0.932		0	0	ng/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7429-90-5	ALUMINIUM (FUME OR DUST)	12800		8.00	41.5	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7439-89-6	IRON	18300		3.94	41.5	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7439-92-1	LEAD	13.3		0.488	3.11	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7439-93-2	LITHIUM	23.6		0.57	4.1	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7439-95-4	MAGNESIUM	3780		1.79	10.4	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7439-96-5	MANGANESE	304		0.0861	1.04	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7439-98-7	MOLYBDENUM	2.07	U	0.176	2.07	mg/kg	J	U	F, B	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-02-0	NICKEL	8.48		0.114	2.07	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-09-7	POTASSIUM	2900	J	14.0	104	mg/kg		J	Q	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-23-5	SODIUM	70.7	J	17.3	104	mg/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-31-5	TIN	10.4	U	0.228	10.4	mg/kg	J	U	B	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-32-6	TITANIUM METAL POWDER	973		0.176	1.04	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-36-0	ANTIMONY	1.89	J	0.519	4.15	mg/kg	J	J	Q, Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-38-2	ARSENIC	2.4	J	0.342	4.15	mg/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-39-3	BARIUM	88.8		0.0342	1.04	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-41-7	BERYLLIUM	0.537	J	0.0695	1.04	mg/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-42-8	BORON	3.26	J	0.861	10.4	mg/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-43-9	CADMIUM	0.468	J	0.0342	1.04	mg/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-47-3	CHROMIUM	14.7		0.0913	3.11	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-48-4	COBALT	4.75		0.0934	1.04	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-50-8	COPPER	6.52		0.187	2.07	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-62-2	VANADIUM (FUME OR DUST)	27.1		0.114	1.04	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-66-6	ZINC	59.4		0.207	4.15	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-67-7	ZIRCONIUM	5.19	U	0.861	5.19	mg/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7440-70-2	CALCIUM METAL	2600		4.17	20.7	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6010C	4/21/2013	PH031	3.6	1	7723-14-0	PHOSPHORUS	406	J	0.529	10.4	mg/kg		J	Q	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6020A	4/21/2013	PH031	3.6	2	7782-49-2	SELENIUM	0.145	J	0.104	0.415	mg/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6020A	4/21/2013	PH031	3.6	2	7440-22-4	SILVER	0.0296	J	0.0207	0.207	mg/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6020A	4/21/2013	PH031	3.6	2	7440-24-6	STRONTIUM	22.5		0.0353	0.415	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	6020A	4/21/2013	PH031	3.6	2	7440-28-0	THALLIUM	0.236		0.0311	0.207	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	7471B	4/18/2013	PH031	3.6	1	7439-97-6	MERCURY	0.0217		0.0105	0.0204	mg/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO																							



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	1.51	J	0.0366	5.10	ng/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	3268-87-9	OCDD	299		0.0289	10.2	ng/kg	B			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	33.4		0.0468	5.10	ng/kg	B			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	39001-02-0	OCDF	7.05	J	0.0215	10.2	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.853	J	0.0383	5.10	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.576	J	0.0373	5.10	ng/kg	JQ	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.197	J	0.0411	1.02	ng/kg	JQ	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.319	J	0.0258	5.10	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	57117-31-4	2,3,4,7,8-PECDF	0.38	J	0.0197	5.10	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.421	J	0.0209	5.10	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.323	J	0.0286	5.10	ng/kg	JBQ	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.87	J	0.0392	5.10	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.359	J	0.0286	5.10	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	3.82	J	0.0221	5.10	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.329	J	0.0294	5.10	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.1	U	0.0289	5.10	ng/kg	JBQ	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	1613B	4/18/2013	PH030	2.7	1	TCDD TEQ	TCDD TEQ	1.25		0	0	ng/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	160.3M	4/23/2013	PH030	2.7	1	MOIST	MOISTURE	2.7		0.10	0.10	%				1785107.728	267962.282	-118.71188	34.234245
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	9045M	4/17/2013	PH030	3.7	1	pH	PH	7.58		0.0100	0.0100	pH unit				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	9.3	J	6.2	19	ug/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	129-00-0	PYRENE	1.7		0.69	1.7	ug/kg	J			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	192-97-2	Benzo(e)pyrene	18	U	3.4	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	205-99-2	BENZO(B)FLUORANTHENE	1.4	J	0.69	1.7	ug/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	206-44-0	FLUORANTHENE	1.8		0.69	1.7	ug/kg				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	218-01-9	Chrysene	1.5	J	0.34	1.7	ug/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	50-32-8	BENZO(A)PYRENE	0.91	J	0.69	1.7	ug/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	85-01-8	PHENANTHRENE	1.1	J	0.69	1.7	ug/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	8270D SIM	4/25/2013	PH030	3.7	1	86-73-7	FLUORENE	1.4	J	0.69	1.7	ug/kg							



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-38-2	ARSENIC	2.83	J	0.343	4.15	mg/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-39-3	BARIUM	90.9		0.0343	1.04	mg/kg	J			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-41-7	BERYLLIUM	0.592	J	0.0696	1.04	mg/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-42-8	BORON	4.8	J	0.862	10.4	mg/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-43-9	CADMIUM	0.533	J	0.0343	1.04	mg/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-47-3	CHROMIUM	20.7		0.0914	3.12	mg/kg				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-48-4	COBALT	6.36		0.0935	1.04	mg/kg				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-50-8	COPPER	8.38		0.187	2.08	mg/kg				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-62-2	VANADIUM (FUME OR DUST)	39.4		0.114	1.04	mg/kg				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-66-6	ZINC	59.4		0.208	4.15	mg/kg				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-67-7	ZIRCONIUM	1.13	J	0.862	5.19	mg/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7440-70-2	CALCIUM METAL	3600		4.17	20.8	mg/kg				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	6010C	4/21/2013	PH030	3.7	1	7723-14-0	PHOSPHORUS	532	J	0.530	10.4	mg/kg		J	Q	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	1746-01-6	2,3,7,8-TCDD	1.03	U	0.0296	1.03	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.976	J	0.0392	5.15	ng/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	3268-87-9	OCDD	198		0.0309	10.3	ng/kg	B			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	15		0.0392	5.15	ng/kg	B			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	39001-02-0	OCDF	5.52	J	0.0250	10.3	ng/kg	JB	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.336	J	0.0407	5.15	ng/kg	JB	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.344	J	0.0346	5.15	ng/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0508	J	0.0409	1.03	ng/kg	JQ	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-39-3	BARIUM	88.2		0.0345	1.05	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-41-7	BERYLLIUM	0.74	J	0.0701	1.05	mg/kg	J	J	Z	1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-42-8	BORON	10.5	U	0.868	10.5	mg/kg	J	U	B	1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-43-9	CADMIUM	0.0858	J	0.0345	1.05	mg/kg	J	J	Z	1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-47-3	CHROMIUM	24.7		0.0921	3.14	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-48-4	COBALT	6.86		0.0941	1.05	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-50-8	COPPER	14.9		0.188	2.09	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-62-2	VANADIUM (FUME OR DUST)	47.9		0.115	1.05	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-66-6	ZINC	56.1		0.209	4.18	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-67-7	ZIRCONIUM	2.47	J	0.868	5.23	mg/kg	J	J	Z	1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7440-70-2	CALCIUM METAL	3820		4.21	20.9	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6010C	4/28/2013	PH033	4.4	1	7723-14-0	PHOSPHORUS	267		0.533	10.5	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6020A	4/29/2013	PH033	4.4	2	7782-49-2	SELENIUM	0.202	J	0.105	0.418	mg/kg	J	J	Z	1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6020A	4/29/2013	PH033	4.4	2	7440-22-4	SILVER	0.0582	J	0.0209	0.209	mg/kg	J	J	Z	1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6020A	4/29/2013	PH033	4.4	2	7440-24-6	STRONTIUM	12.1	J	0.0356	0.418	mg/kg	J	J	Q	1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	6020A	4/29/2013	PH033	4.4	2	7440-28-0	THALLIUM	0.255		0.0314	0.209	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	7471B	4/23/2013	PH033	4.4	1	7439-97-6	MERCURY	0.0252		0.0106	0.0205	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	8015M	4/23/2013	PH033	4.4	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	8015M	4/23/2013	PH033	4.4	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	8015M	4/23/2013	PH033	4.4	1	PHCC21C30	EFH (C21-C30)	17		2.1	5.2	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	8015M	4/23/2013	PH033	4.4	1	PHCC30C40	EFH (C30-C40)	28		4.2	10	mg/kg				1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft																								



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	8270D SIM	4/29/2013	PH033	4.4	1	91-20-3	NAPHTHALENE	1.7	U	0.70	1.7	ug/kg	J	U	F	1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	8270D SIM	4/29/2013	PH033	4.4	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.70	1.7	ug/kg	U			1784551.329	267615.843	-118.71371	34.233282
SL-557-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026477	LL	9045M	4/18/2013	PH033	4.4	1	pH	PH	6.76		0.0100	0.0100	pH unit				1784551.329	267615.843	-118.71371	34.233282
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	160.3M	4/25/2013	PH033	3.5	1	MOIST	MOISTURE	3.5		0.10	0.10	%				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	1746-01-6	2,3,7,8-TCDD	1.03	U	0.0253	1.03	ng/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	1.15	J	0.0342	5.14	ng/kg	JB	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	3268-87-9	OCDD	505		0.0388	10.3	ng/kg	B			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	64.4		0.0484	5.14	ng/kg	B			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	39001-02-0	OCDF	10.8		0.0255	10.3	ng/kg	B			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.4	J	0.0350	5.14	ng/kg	JB	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.14	U	0.0306	5.14	ng/kg	JB	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.03	U	0.0200	1.03	ng/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.438	J	0.0197	5.14	ng/kg	JB	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	57117-31-4	2,3,4,7,8-PECDF	5.14	U	0.0122	5.14	ng/kg	JBQ	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.14	U	0.0131	5.14	ng/kg	JBQ	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.14	U	0.0259	5.14	ng/kg	JB	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	2.48	J	0.0358	5.14	ng/kg	JB	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.168	J	0.0255	5.14	ng/kg	JB	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	3.96	J	0.0138	5.14	ng/kg	JB	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.14	U	0.0275	5.14	ng/kg	JBQ	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.14	U	0.0263	5.14	ng/kg	JB	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	1613B	4/22/2013	PH033	3.5	1	TCDD TEQ	TCDD TEQ	1.46		0	0	ng/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7429-90-5	ALUMINUM (FUME OR DUST)	14800		7.99	41.5	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7439-89-6	IRON	22700		3.94	41.5	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7439-92-1	LEAD	5.53	J	0.487	3.11	mg/kg		J	E, Q	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7439-93-2	LITHIUM	26		0.57	4.1	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7439-95-4	MAGNESIUM	4890		1.79	10.4	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7439-96-5	MANGANESE	320		0.0860	1.04	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7439-98-7	MOLYBDENUM	2.07	U	0.176	2.07	mg/kg	J	U	F	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-02-0	NICKEL	10.7		0.114	2.07	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-09-7	POTASSIUM	3090	J	14.0	104	mg/kg		J	Q	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-23-5	SODIUM	111		17.3	104	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-31-5	TIN	10.4	U	0.228	10.4	mg/kg	J	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-32-6	TITANIUM METAL POWDER	1230		0.176	1.04	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-36-0	ANTIMONY	4.15	UJ	0.518	4.15	mg/kg	U	UJ	Q	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-38-2	ARSENIC	4.67		0.342	4.15	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-39-3	BARIUM	78.9		0.0342	1.04	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-41-7	BERYLLIUM	0.573	J	0.0694	1.04	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-42-8	BORON	10.4	U	0.860	10.4	mg/kg	J	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-43-9	CADMIUM	0.102	J	0.0342	1.04	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-47-3	CHROMIUM	19.5		0.0912	3.11	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	6010C	4/28/2013	PH033	3.5	1	7440-48-4	COBALT	5.21		0.0933	1.04	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0																													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	150	J	62	190	ug/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	117-84-0	Di-n-octylphthalate	190	U	62	190	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	120-12-7	ANTHRACENE	17	U	3.4	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	129-00-0	PYRENE	13	J	6.9	17	ug/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	131-11-3	DIMETHYL PHTHALATE	190	U	62	190	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	191-24-2	BENZO(G,H,I)PERYLENE	40		6.9	17	ug/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	192-97-2	Benzo(e)pyrene	100	J	34	180	ug/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	193-39-5	INDENO(1,2,3-CD)PYRENE	15	J	6.9	17	ug/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	205-99-2	BENZO(B)FLUORANTHENE	39		6.9	17	ug/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	206-44-0	FLUORANTHENE	15	J	6.9	17	ug/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	207-08-9	BENZO(K)FLUORANTHENE	46		6.9	17	ug/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	208-96-8	ACENAPHTHYLENE	17	U	3.4	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	218-01-9	Chrysene	39		3.4	17	ug/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	50-32-8	BENZO(A)PYRENE	28		6.9	17	ug/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	53-70-3	DIBENZO(A,H)ANTHRACENE	17		6.9	17	ug/kg	J			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	56-55-3	BENZO(A)ANTHRACENE	7.9	J	6.9	17	ug/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	17	U	6.9	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	83-32-9	ACENAPHTHENE	17	U	6.9	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	84-66-2	DIETHYL PHTHALATE	190	U	62	190	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	84-74-2	Di-n-butylphthalate	190	U	62	190	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	85-01-8	PHENANTHRENE	17	U	6.9	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	85-68-7	BENZYL BUTYL PHTHALATE	190	U	62	190	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	86-73-7	FLUORENE	17	U	6.9	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	90-12-0	1-METHYLNAPHTHALENE	17	U	6.9	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	91-20-3	NAPHTHALENE	17	U	6.9	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8270D SIM	5/1/2013	PH040	2.9	10	91-57-6	2-METHYLNAPHTHALENE	17	U	6.9	17	ug/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	9045M	4/27/2013	PH040	2.9	1	pH	PH	8.12		0.0100	0.0100	pH unit				1785257.349	267688.605	-118.71138	34.233496
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	160.3M	4/16/2013	PH027	2.4	1	MOIST	MOISTURE	2.4		0.10	0.10	%				1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	1746-01-6	2,3,7,8-TCDD	0.0932	J	0.0389	0.998	ng/kg	J	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	2.77	J	0.0570	4.99	ng/kg	JB	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	3268-87-9	OCDD	1740		0.0518	9.98	ng/kg	B			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	158		0.0782	4.99	ng/kg	B			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	39001-02-0	OCDF	50.9		0.0256	9.98	ng/kg	B			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.72	J	0.0596	4.99	ng/kg	JB	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.615	J	0.0804	4.99	ng/kg	JBQ	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.73	J	0.0830	0.998	ng/kg	J	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	2.65	J	0.0339	4.99	ng/kg	JB	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	57117-31-4	2,3,4,7,8-PECDF	0.783	J	0.0430	4.99	ng/kg	JB	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	3.51	J	0.0476	4.99	ng/kg	JB	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	57117-44-9	1,2,3,6,7,8-HXCDF	1.24	J	0.0483	4.99	ng/kg	JB	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	4.86	J	0.0611	4.99	ng/kg	JB	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	1613B	4/12/2013	PH027	2.4	1	60851-34-5	2,3,4,6,7,8-HXCDF	1.28	J	0.0480	4.99	ng/kg	JB	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016																				



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8015M	4/16/2013	PH027	2.4	10	PHCC30C40	EFH (C30-C40)	700		41	100	mg/kg				1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8015M	4/16/2013	PH027	2.4	10	PHCC8C11	EFH (C8-C11)	51	U	20	51	mg/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	11097-69-1	Aroclor 1254	37		4.5	17	ug/kg				1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	11126-42-4	Aroclor 5460	23	J	10	34	ug/kg	J	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8082A	4/19/2013	PH027	2.4	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	180	U	61	180	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	117-84-0	Di-n-octylphthalate	180	U	61	180	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	120-12-7	ANTHRACENE	6	J	3.4	17	ug/kg	J	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	129-00-0	PYRENE	64		6.8	17	ug/kg				1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	131-11-3	DIMETHYL PHTHALATE	180	U	61	180	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	191-24-2	BENZO(G,H,I)PERYLENE	17	U	6.8	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	192-97-2	Benzo(e)pyrene	170	U	34	170	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	193-39-5	INDENO(1,2,3-CD)PYRENE	17	U	6.8	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	205-99-2	BENZO(B)FLUORANTHENE	11	J	6.8	17	ug/kg	J	J	Z	1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	206-44-0	FLUORANTHENE	82		6.8	17	ug/kg				1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	207-08-9	BENZO(K)FLUORANTHENE	17	U	6.8	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	208-96-8	ACENAPHTHYLENE	17	U	3.4	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	218-01-9	Chrysene	22		3.4	17	ug/kg				1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	50-32-8	BENZO(A)PYRENE	17	U	6.8	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	53-70-3	DIBENZO(A,H)ANTHRACENE	17	U	6.8	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	56-55-3	BENZO(A)ANTHRACENE	17	U	6.8	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	17	U	6.8	17	ug/kg	U			1785198.142	267784.625	-118.71158	34.233758
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	90-12-0	1-METHYLNAPHTHALENE	0.94	J	0.68	1.7	ug/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	91-20-3	NAPHTHALENE	2.6		0.68	1.7	ug/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	91-57-6	2-METHYLNAPHTHALENE	1.6	J	0.68	1.7	ug/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	9045M	4/11/2013	PH028	1.6	1	pH	PH	7.49		0.0100	0.0100	pH unit				1785025.732	267878.559	-118.71215	34.234013
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	160.3M	4/16/2013	PH028	1.9	1	MOIST	MOISTURE	1.9		0.10	0.10	%				1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	1613B	4/15/2013	PH028	1.9	1	1746-01-6	2,3,7,8-TCDD	0.984	U	0.0383	0.984	ng/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	1613B	4/15/2013	PH028	1.9	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.492	J	0.0436	4.92	ng/kg	JB	J	Z	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	1613B	4/15/2013	PH028	1.9	1	3268-87-9	OCDD	70.7		0.0307	9.84	ng/kg	B			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	1613B	4/15/2013	PH028	1.9	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	11.1		0.0405	4.92	ng/kg	B			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	1613B	4/15/2013	PH028	1.9	1	39001-02-0	OCDF	2.07	J	0.0480	9.84	ng/kg	JB	J	Z	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	1613B	4/15/2013	PH028	1.9	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.231	J	0.0447	4.92	ng/kg	JB	J	Z	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	1613B	4/15/2013	PH028	1.9	1	4032													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	6020A	4/21/2013	PH028	1.9	2	7782-49-2	SELENIUM	0.196	J	0.102	0.408	mg/kg	J	J	Z	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	6020A	4/21/2013	PH028	1.9	2	7440-22-4	SILVER	0.0306	J	0.0204	0.204	mg/kg	J	J	Z	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	6020A	4/21/2013	PH028	1.9	2	7440-24-6	STRONTIUM	12.5	J	0.0347	0.408	mg/kg		J	O	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	6020A	4/21/2013	PH028	1.9	2	7440-28-0	THALLIUM	0.232		0.0306	0.204	mg/kg				1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	7471B	4/18/2013	PH028	1.9	1	7439-97-6	MERCURY	0.0203	U	0.0105	0.0203	mg/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8015M	4/19/2013	PH028	1.9	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8015M	4/19/2013	PH028	1.9	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8015M	4/19/2013	PH028	1.9	1	PHCC21C30	EFH (C21-C30)	10		2.0	5.1	mg/kg				1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8015M	4/19/2013	PH028	1.9	1	PHCC30C40	EFH (C30-C40)	33		4.1	10	mg/kg				1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8015M	4/19/2013	PH028	1.9	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8082A	4/20/2013	PH028	1.9	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	18	U	6.1	18	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	129-00-0	PYRENE	1.6	J	0.68	1.7	ug/kg	J	J	Z	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.68	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.68	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	205-99-2	BENZO(B)FLUORANTHENE	1.5	J	0.68	1.7	ug/kg	J	J	Z	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	206-44-0	FLUORANTHENE	1.6	J	0.68	1.7	ug/kg	J	J	Z	1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.68	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	218-01-9	Chrysene	1.7	U	0.34	1.7	ug/kg				1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.68	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	84-66-2	DIEHTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1784962.842	267839.654	-118.71236	34.233905
SL-549-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018437	LL	8270D SIM	4/23/2013	PH028	1.9	1	85													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	193-39-5	INDENO(1,2,3-CD)PYRENE	13		0.70	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	205-99-2	BENZO(B)FLUORANTHENE	62		0.70	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	206-44-0	FLUORANTHENE	54		0.70	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	207-08-9	BENZO(K)FLUORANTHENE	26		0.70	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	218-01-9	Chrysene	47		0.35	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	50-32-8	BENZO(A)PYRENE	41		0.70	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	53-70-3	DIBENZO(A,H)ANTHRACENE	4.4		0.70	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	56-55-3	BENZO(A)ANTHRACENE	42		0.70	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.70	1.7	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	83-32-9	ACENAPHTHENE	1.7	U	0.70	1.7	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	84-66-2	DIETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	84-74-2	Di-n-butylphthalate	7.4	J	6.3	19	ug/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	85-01-8	PHENANTHRENE	8.6		0.70	1.7	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.3	19	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	86-73-7	FLUORENE	1.7	U	0.70	1.7	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.70	1.7	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	91-20-3	NAPHTHALENE	0.93	J	0.70	1.7	ug/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	8270D SIM	4/25/2013	PH032	5	1	91-57-6	2-METHYLNAPHTHALENE	0.94	J	0.70	1.7	ug/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	9045M	4/17/2013	PH032	5	1	pH	pH	7.94		0.0100	0.0100	pH unit				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	160.3M	4/23/2013	PH032	10.9	1	MOIST	MOISTURE	10.9		0.10	0.10	%				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	1746-01-6	2,3,7,8-TCDD	0.0801	J	0.0234	1.12	ng/kg	JQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.262	J	0.0210	5.58	ng/kg	JBQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	3268-87-9	OCDD	10.7	J	0.0227	11.2	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	1.26	J	0.0242	5.58	ng/kg	JBQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	39001-02-0	OCDF	11.2	U	0.0339	11.2	ng/kg	JBQ	U	B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.0961	J	0.0221	5.58	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.235	J	0.0226	5.58	ng/kg	JBQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0392	J	0.0182	1.12	ng/kg	JQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	55673-89-7	1,2,3,4,7,8,9-HXCDF	5.58	U	0.0169	5.58	ng/kg	JB	U	B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	57117-31-4	2,3,4,7,8-PECDF	5.58	U	0.0131	5.58	ng/kg	JBQ	U	B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.309	J	0.0124	5.58	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.58	U	0.0163	5.58	ng/kg	JB	U	B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.205	J	0.0224	5.58	ng/kg	JBQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.58	U	0.0183	5.58	ng/kg	JB	U	B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.58	U	0.00828	5.58	ng/kg	JB	U	B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.58	U	0.0194	5.58	ng/kg	JB	U	B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.439	J	0.0226	5.58	ng/kg	JBQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	1613B	4/19/2013	PH032	10.9	1	TCDD TEQ	TCDD TEQ	0.0574		0	0	ng/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	6010C	4/22/2013	PH032	10.9	5	7439-89-6	IRON	30900		20.9	220	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	6010C	4/21/2013	PH032	10.9	1	7429-90-5	ALUMINIUM (FUME OR DUST)	30600		8.48	44.0	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	6010C	4/21/2013	PH032	10.9	1	7439-92-1	LEAD	12.1		0.517	3.30	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0</																													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8082A	4/23/2013	PH032	10.9	1	11126-42-4	Aroclor 5460	36	U	11	36	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8082A	4/23/2013	PH032	10.9	1	11141-16-5	Aroclor 1232	19	U	4.5	19	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8082A	4/23/2013	PH032	10.9	1	12642-23-8	Aroclor 5442	36	U	11	36	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8082A	4/23/2013	PH032	10.9	1	12672-29-6	Aroclor 1248	19	U	3.6	19	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8082A	4/23/2013	PH032	10.9	1	12674-11-2	Aroclor 1016	19	U	3.6	19	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8082A	4/23/2013	PH032	10.9	1	37324-23-5	Aroclor 1262	19	U	3.6	19	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8082A	4/23/2013	PH032	10.9	1	53469-21-9	Aroclor 1242	19	U	3.6	19	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8082A	4/23/2013	PH032	10.9	1	63496-31-1	Aroclor 5432	36	U	11	36	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7439-92-1	LEAD	15	J	0.477	3.05	mg/kg		J	E, Q	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7439-93-2	LITHIUM	21.5		0.56	4.1	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7439-95-4	MAGNESIUM	4700		1.76	10.2	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7439-96-5	MANGANESE	290		0.0843	1.02	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7439-98-7	MOLYBDENUM	2.03	U	0.173	2.03	mg/kg	J	U	F	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-02-0	NICKEL	11.3		0.112	2.03	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-09-7	POTASSIUM	4240	J	13.7	102	mg/kg		J	Q	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-23-5	SODIUM	67.7	J	17.0	102	mg/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-31-5	TIN	10.2	U	0.223	10.2	mg/kg	J	U	B	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-32-6	TITANIUM METAL POWDER	1050		0.173	1.02	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-36-0	ANTIMONY	0.585	J	0.508	4.06	mg/kg	J	J	Q, Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-38-2	ARSENIC	4.74		0.335	4.06	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-39-3	BARIUM	72.3		0.0335	1.02	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-41-7	BERYLLIUM	0.487	J	0.0680	1.02	mg/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-42-8	BORON	10.2	U	0.843	10.2	mg/kg	J	U	B	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-43-9	CADMIUM	0.336	J	0.0335	1.02	mg/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-47-3	CHROMIUM	20.4		0.0894	3.05	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-48-4	COBALT	5.18		0.0914	1.02	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	6010C	4/28/2013	PH035	4.4	1	7440-50-8	COPPER	16.9		0.183	2.03	mg/kg				1785816.004	268167.926	-118.70954	34.234824
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	1746-01-6	2,3,7,8-TCDD	0.139	J	0.0266	1.02	ng/kg	J	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	2.53	J	0.0332	5.10	ng/kg	JB	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	3268-87-9	OCDD	948		0.0367	10.2	ng/kg	B			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	128		0.0557	5.10	ng/kg	B			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	39001-02-0	OCDF	70		0.0239	10.2	ng/kg	B			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.39	J	0.0356	5.10	ng/kg	JB	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.6	J	0.0460	5.10	ng/kg	JBQ	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.91		0.0849	1.02	ng/kg	C			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	1.36	J	0.0354	5.10	ng/kg	JB	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	57117-31-4	2,3,4,7,8-PECDF	1.73	J	0.0419	5.10	ng/kg	JB	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.05	J	0.0448	5.10	ng/kg	JB	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	57117-44-9	1,2,3,6,7,8-HXCDF	1.23	J	0.0352	5.10	ng/kg	JB	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	4.08	J	0.0360	5.10	ng/kg	J	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	60851-34-5	2,3,4,6,7,8-HXCDF	1.12	J	0.0361	5.10	ng/kg	JB	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	1613B	4/26/2013	PH035	2.4	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	21.1		0.0295	5.10	ng/kg	B			1785827.12	268126.112	-118.70951	34.234709</



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8015M	4/26/2013	PH035	2.4	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	11096-82-5	Aroclor 1260	87	U	20	87	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	11097-69-1	Aroclor 1254	430		22	87	ug/kg				1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	11100-14-4	Aroclor 1268	87	U	17	87	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	11104-28-2	Aroclor 1221	87	U	26	87	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	11126-42-4	Aroclor 5460	110	J	51	170	ug/kg	J	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	11141-16-5	Aroclor 1232	87	U	21	87	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	12642-23-8	Aroclor 5442	170	U	51	170	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	12672-29-6	Aroclor 1248	87	U	17	87	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	12674-11-2	Aroclor 1016	87	U	17	87	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	37324-23-5	Aroclor 1262	87	U	17	87	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	53469-21-9	Aroclor 1242	87	U	17	87	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8082A	4/29/2013	PH035	2.4	5	63496-31-1	Aroclor 5432	170	U	51	170	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	180	U	61	180	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	117-84-0	Di-n-octylphthalate	180	U	61	180	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	120-12-7	ANTHRACENE	17	U	3.4	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	129-00-0	PYRENE	7.7	J	6.8	17	ug/kg	J	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	131-11-3	DIMETHYL PHTHALATE	180	U	61	180	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	191-24-2	BENZO(G,H,I)PERYLENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	192-97-2	Benzo(e)pyrene	170	U	34	170	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	193-39-5	INDENO(1,2,3-CD)PYRENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	205-99-2	BENZO(B)FLUORANTHENE	13	J	6.8	17	ug/kg	J	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	206-44-0	FLUORANTHENE	7.7	J	6.8	17	ug/kg	J	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	207-08-9	BENZO(K)FLUORANTHENE	14	J	6.8	17	ug/kg	J	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	208-96-8	ACENAPHTHYLENE	17	U	3.4	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	218-01-9	Chrysene	7.5	J	3.4	17	ug/kg	J	J	Z	1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	50-32-8	BENZO(A)PYRENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	53-70-3	DIBENZO(A,H)ANTHRACENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	56-55-3	BENZO(A)ANTHRACENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	83-32-9	ACENAPHTHENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	84-66-2	DIETHYL PHTHALATE	180	U	61	180	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	84-74-2	Di-n-butylphthalate	180	U	61	180	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	85-01-8	PHENANTHRENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	85-68-7	BENZYL BUTYL PHTHALATE	180	U	61	180	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	86-73-7	FLUORENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	90-12-0	1-METHYLNAPHTHALENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	91-20-3	NAPHTHALENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	8270D SIM	4/30/2013	PH035	2.4	10	91-57-6	2-METHYLNAPHTHALENE	17	U	6.8	17	ug/kg	U			1785827.12	268126.112	-118.70951	34.234709
SL-518-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029644	LL	9045M	4/22/2013	PH035	2.4	1	pH	PH	7.78		0.0100	0.0100	pH unit				1785827.12	268126.112	-118.70951	34.234709
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	160_3M	4/23/2013	PH035	2	1	MOIST	MOISTURE	2		0.10	0.10	%				1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	1613B	4/26/2013	PH035	2	1	1746-01-6	2,3,7,8-TCDD	0.0444	J	0.0266	1.01	ng/kg	JQ	J	Z	1785749.307	268132.311	-118.70976	34.234724
SL-520-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029645	LL	1613B	4/26/2013	PH035	2	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.479	J	0.0261	5.04	ng/kg	JB						



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	85-01-8	PHENANTHRENE	2.3		0.69	1.7	ug/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	85-68-7	BENZYL BUTYL PHTHALATE	19		6.2	19	ug/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	86-73-7	FLUORENE	1.7		0.69	1.7	ug/kg	J			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	90-12-0	1-METHYLNAPHTHALENE	1.1	J	0.69	1.7	ug/kg	J	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	91-20-3	NAPHTHALENE	1.6	J	0.69	1.7	ug/kg	J	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	91-57-6	2-METHYLNAPHTHALENE	1.9		0.69	1.7	ug/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	9045M	4/26/2013	PH038	3.6	1	pH	PH	6.54		0.0100	0.0100	pH unit				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	160.3M	5/1/2013	PH038	3.5	1	MOIST	MOISTURE	3.5		0.10	0.10	%				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	1746-01-6	2,3,7,8-TCDD	0.0364	J	0.0230	1.01	ng/kg	JQ	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.07	U	0.0165	5.07	ng/kg	JBQ	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	3268-87-9	OCDD	1.67	J	0.0178	10.1	ng/kg	JB	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	5.07	U	0.0165	5.07	ng/kg	JB	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	39001-02-0	OCDF	10.1	U	0.0246	10.1	ng/kg	JB	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.0312	J	0.0173	5.07	ng/kg	JQ	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.0809	J	0.0213	5.07	ng/kg	JQ	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0271	J	0.0220	1.01	ng/kg	J	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.07	U	0.0176	5.07	ng/kg	JBQ	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	57117-31-4	2,3,4,7,8-PECDF	0.109	J	0.0112	5.07	ng/kg	JB	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.07	U	0.0115	5.07	ng/kg	JBQ	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.07	U	0.0110	5.07	ng/kg	JB	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.0901	J	0.0170	5.07	ng/kg	J	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.07	U	0.0117	5.07	ng/kg	JB	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.07	U	0.0115	5.07	ng/kg	JB	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.07	U	0.0118	5.07	ng/kg	JBQ	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.07	U	0.0134	5.07	ng/kg	JBQ	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	1613B	5/2/2013	PH038	3.5	1	TCDD TEQ	TCDD TEQ	0.057		0	0	ng/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7429-90-5	ALUMINUM (FUME OR DUST)	14000		7.91	41.0	mg/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7439-89-6	IRON	22500		3.90	41.0	mg/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7439-92-1	LEAD	4.78	J	0.482	3.08	mg/kg		J	E, Q	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7439-93-2	LITHIUM	17.7		0.56	4.1	mg/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7439-95-4	MAGNESIUM	5820		1.77	10.3	mg/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7439-96-5	MANGANESE	277		0.0852	1.03	mg/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7439-98-7	MOLYBDENUM	2.05	U	0.174	2.05	mg/kg	J	U	F	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7440-02-0	NICKEL	13	J	0.113	2.05	mg/kg		J	A	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7440-09-7	POTASSIUM	2210	J	13.9	103	mg/kg		J	Q	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7440-23-5	SODIUM	103	U	17.1	103	mg/kg	J	U	F	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7440-31-5	TIN	10.3	U	0.226	10.3	mg/kg	J	U	B	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7440-32-6	TITANIUM METAL POWDER	1370		0.174	1.03	mg/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	6010C	5/3/2013	PH038	3.5	1	7440-36-0	ANTIMONY	0.83	J	0.513	4.10	mg/kg	J	J	Q, Z	1785			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	120-12-7	ANTHRACENE	1.7	U	0.35	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	129-00-0	PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	205-99-2	BENZO(B)FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	206-44-0	FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	207-08-9	BENZO(K)FLUORANTHENE	0.77	J	0.69	1.7	ug/kg	J	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	218-01-9	Chrysene	1.7	U	0.35	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	85-01-8	PHENANTHRENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	86-73-7	FLUORENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	91-20-3	NAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	8270D SIM	5/1/2013	PH038	3.5	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-2.5-3.5	4/24/2013	N	2.5	3.5	ft	SO	7_DG		7034503	LL	9045M	4/26/2013	PH038	3.5	1	pH	PH	6.4		0.0100	0.0100	pH unit				1785466.394	268066.298	-118.7107	34.234538
SL-528-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034501	LL	160.3M	5/1/2013	PH038	2.6	1	MOIST	MOISTURE	2.6		0.10	0.10	%				1785424.475	268116.636	-118.71084	34.234675
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.36	J	0.0702	5.30	ng/kg	JB	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	57117-31-4	2,3,4,7,8-PCDF	0.849	J	0.0364	5.30	ng/kg	JB	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.427	J	0.0386	5.30	ng/kg	JBQ	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.388	J	0.0303	5.30	ng/kg	JB	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.35	J	0.0354	5.30	ng/kg	JB	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.433	J	0.0315	5.30	ng/kg	JB	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	4.16	J	0.0600	5.30	ng/kg	JB	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.375	J	0.0320	5.30	ng/kg	JB	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.4	J	0.0361	5.30	ng/kg	JB	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	1613B	4/17/2013	PH029	6.6	1	TCDD TEQ	TCDD TEQ	1.06		0	0	ng/kg				1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	6010C	4/21/2013	PH029	6.6	1	7440-42-8	BORON	6.79	J	0.854	10.3	mg/kg	J	J	Z	1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	6010C	4/19/2013	PH029	6.6	1	7429-90-5	ALUMINUM (FUME OR DUST)	14800		7.94	41.2	mg/kg				1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	6010C	4/19/2013	PH029	6.6	1	7439-89-6	IRON	19600		3.91	41.2	mg/kg				1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	6010C	4/19/2013	PH029	6.6	1	7439-92-1	LEAD	10.5		0.484	3.09	mg/kg				1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	6010C	4/19/2013	PH029	6.6	1	7439-93-2	LITHIUM	20.4		0.57	4.1	mg/kg				1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	6010C	4/19/2013	PH029	6.6	1	7439-95-4	MAGNESIUM	4080		1.78	10.3	mg/kg				1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5																									



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8082A	4/20/2013	PH029	6.6	1	12674-11-2	Aroclor 1016	18	U	3.5	18	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8082A	4/20/2013	PH029	6.6	1	37324-23-5	Aroclor 1262	18	U	3.5	18	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8082A	4/20/2013	PH029	6.6	1	53469-21-9	Aroclor 1242	18	U	3.5	18	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8082A	4/20/2013	PH029	6.6	1	63496-31-1	Aroclor 5432	35	U	11	35	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1900	U	640	1900	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	117-84-0	Di-n-octylphthalate	1900	U	640	1900	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	120-12-7	ANTHRACENE	180	U	36	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	129-00-0	PYRENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	131-11-3	DIMETHYL PHTHALATE	1900	U	640	1900	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	191-24-2	BENZO(G,H,I)PERYLENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	192-97-2	BENZO(e)pyrene	1800	U	360	1800	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	193-39-5	INDENO(1,2,3-CD)PYRENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	205-99-2	BENZO(B)FLUORANTHENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	206-44-0	FLUORANTHENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	207-08-9	BENZO(K)FLUORANTHENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	208-96-8	ACENAPHTHYLENE	180	U	36	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	218-01-9	Chrysene	180	U	36	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	50-32-8	BENZO(A)PYRENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	53-70-3	DIBENZO(A,H)ANTHRACENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	56-55-3	BENZO(A)ANTHRACENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	83-32-9	ACENAPHTHENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	84-66-2	DIETHYL PHTHALATE	1900	U	640	1900	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	84-74-2	Di-n-butylphthalate	1900	U	640	1900	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	85-01-8	PHENANTHRENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	85-68-7	BENZYL BUTYL PHTHALATE	1900	U	640	1900	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	86-73-7	FLUORENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	90-12-0	1-METHYLNAPHTHALENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	91-20-3	NAPHTHALENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	8270D SIM	4/23/2013	PH029	6.6	100	91-57-6	2-METHYLNAPHTHALENE	180	U	71	180	ug/kg	U			1784702.393	267568.288	-118.71321	34.233154
SL-555-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020347	LL	9045M	4/12/2013	PH029	6.6	1	pH	PH	7.79		0.0100	0.0100	pH unit				1784702.393	267568.288	-118.71321	34.233154
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	1746-01-6	2,3,7,8-TCDD	0.0697	J	0.0330	1.02	ng/kg	JQ	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	1.89	J	0.0346	5.09	ng/kg	JB	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	3268-87-9	OCDD	909		0.0487	10.2	ng/kg	B			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	84.5		0.0691	5.09	ng/kg	B			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	39001-02-0	OCDF	11.5		0.0332	10.2	ng/kg	B			1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.12	J	0.0368	5.09	ng/kg	JB	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.367	J	0.0491	5.09	ng/kg	JBQ	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.142	J	0.0506	1.02	ng/kg	J	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.317	J	0.0259	5.09	ng/kg	JB	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	57117-31-4	2,3,4,7,8-PCDF	0.246	J	0.0437	5.09	ng/kg	JB	J	Z	1785849.999	267997.949	-118.70943	34.234357
SL-521-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023140	LL	1613B	4/18/2013	PH031	1.8	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.588	J	0.0438	5.09	ng/kg	JB	J	Z	1			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6020A	4/21/2013	PH030	4.1	2	7440-28-0	THALLIUM	0.262		0.0304	0.202	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6020A	4/21/2013	PH030	4.1	2	7782-49-2	SELENIUM	0.166	J	0.101	0.405	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7429-90-5	ALUMINUM (FUME OR DUST)	15900		7.81	40.5	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7439-89-6	IRON	24000		3.85	40.5	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7439-92-1	LEAD	6.08		0.476	3.04	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7439-93-2	LITHIUM	30.3		0.56	4.0	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7439-95-4	MAGNESIUM	5420		1.75	10.1	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7439-96-5	MANGANESE	346		0.0840	1.01	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7439-98-7	MOLYBDENUM	2.02	U	0.172	2.02	mg/kg	J	U	F	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-02-0	NICKEL	12.9		0.111	2.02	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-09-7	POTASSIUM	4100	J	13.7	101	mg/kg		J	Q	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-23-5	SODIUM	70.7	J	16.9	101	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-31-5	TIN	10.1	U	0.223	10.1	mg/kg	J	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-32-6	TITANIUM METAL POWDER	1300		0.172	1.01	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-36-0	ANTIMONY	2.47	J	0.506	4.05	mg/kg	J	J	Q, Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-38-2	ARSENIC	2.17	J	0.334	4.05	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-39-3	BARIUM	96.9		0.0334	1.01	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-41-7	BERYLLIUM	0.596	J	0.0678	1.01	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-42-8	BORON	2.92	J	0.840	10.1	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-43-9	CADMIUM	0.603	J	0.0334	1.01	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-47-3	CHROMIUM	22.3		0.0891	3.04	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-48-4	COBALT	6.49		0.0911	1.01	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-50-8	COPPER	9.09		0.182	2.02	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-62-2	VANADIUM (FUME OR DUST)	40.8		0.111	1.01	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-66-6	ZINC	63.2		0.202	4.05	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-67-7	ZIRCONIUM	1.05	J	0.840	5.06	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7440-70-2	CALCIUM METAL	2360		4.07	20.2	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	6010C	4/21/2013	PH030	4.1	1	7723-14-0	PHOSPHORUS	531	J	0.516	10.1	mg/kg		J	Q	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	1746-01-6	2,3,7,8-TCDD	1.04	U	0.0215	1.04	ng/kq	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.108	J	0.0214	5.19	ng/kq	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	3268-87-9	OCDD	14.6		0.0168	10.4	ng/kg	B			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	1.55	J	0.0229	5.19	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	39001-02-0	OCDF	0.47	J	0.0214	10.4	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.19	U	0.0228	5.19	ng/kq	JB	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.075	J	0.0227	5.19	ng/kg	JQ	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0363	J	0.0212	1.04	ng/kg	JQ	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.19	U	0.0125	5.19	ng/kg	JBQ	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	57117-31-4	2,3,4,7,8-PECDF	5.19	U	0.0111	5.19	ng/kg	JB	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.19	U	0.0117	5.19	ng/kg	JBQ	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.19	U	0.0142	5.19	ng/kg	JB	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.11	J	0.0232	5.19	ng/kg	JB	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	1613B	4/18/2013	PH030	4.1	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.19	U	0.0137	5.19	ng/kg	JB	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/																												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8082A	4/22/2013	PH030	2.7	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8082A	4/22/2013	PH030	2.7	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8082A	4/22/2013	PH030	2.7	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8082A	4/22/2013	PH030	2.7	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8082A	4/22/2013	PH030	2.7	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8082A	4/22/2013	PH030	2.7	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8015M	4/19/2013	PH030	2.7	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.1	5.1	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8015M	4/19/2013	PH030	2.7	1	PHCC15C20	EFH (C15-C20)	3.5	J	2.1	5.1	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8015M	4/19/2013	PH030	2.7	1	PHCC21C30	EFH (C21-C30)	13		2.1	5.1	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8015M	4/19/2013	PH030	2.7	1	PHCC30C40	EFH (C30-C40)	28		4.1	10	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	8015M	4/19/2013	PH030	2.7	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.1	5.1	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8015M	4/23/2013	PH031	2.3	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785163.374	267925.565	-118.71117	34.234145
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	7471B	4/18/2013	PH030	2.7	1	7439-97-6	MERCURY	0.0151	J	0.0104	0.0202	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6020A	4/21/2013	PH030	2.7	2	7440-22-4	SILVER	0.2	U	0.0200	0.200	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6020A	4/21/2013	PH030	2.7	2	7440-24-6	STRONTIUM	15.1		0.0339	0.399	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6020A	4/21/2013	PH030	2.7	2	7440-28-0	THALLIUM	0.258		0.0299	0.200	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6020A	4/21/2013	PH030	2.7	2	7782-49-2	SELENIUM	0.399	U	0.0998	0.399	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7429-90-5	ALUMINUM (FUME OR DUST)	11800		7.69	39.9	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7439-89-6	IRON	21600		3.79	39.9	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7439-92-1	LEAD	7.03		0.469	2.99	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7439-93-2	LITHIUM	27.7		0.55	4.0	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7439-95-4	MAGNESIUM	4660		1.73	9.98	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7439-96-5	MANGANESE	299		0.0828	0.998	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7439-98-7	MOLYBDENUM	2	U	0.170	2.00	mg/kg	J	U	F	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7440-02-0	NICKEL	9.04		0.110	2.00	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7440-09-7	POTASSIUM	4110	J	13.5	99.8	mg/kg		J	Q	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7440-23-5	SODIUM	61.6	J	16.7	99.8	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7440-31-5	TIN	9.98	U	0.220	9.98	mg/kg	J	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7440-32-6	TITANIUM METAL POWDER	1150		0.170	0.998	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7440-36-0	ANTIMONY	1.78	J	0.499	3.99	mg/kg	J	J	Q, Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022149	LL	6010C	4/21/2013	PH030	2.7	1	7440-38-2	ARSENIC	2.11	J	0.329	3.99	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	18.1		0.118	4.93	ng/kg	B			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	3268-87-9	OCDD	23100	J	0.104	9.86	ng/kg	BE	J	*#	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	2000	J	0.223	4.93	ng/kg	BE	J	*#	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	39001-02-0	OCDF	177		0.0422	9.86	ng/kg	B			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	3660	J	0.114	4.93	ng/kg	BE	J	*#	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	15.9		0.102	4.93	ng/kg	B			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.33		0.112	0.986	ng/kg	C			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	12.2		0.0544	4.93	ng/kg	B			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	57117-31-4	2,3,4,7,8-PECDF	2.54	J	0.0458	4.93	ng/kg	JB	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	6.58		0.0468	4.93	ng/kg	B			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	1613B	4/22/2013	PH033	2.9	1	57117-44-9	1,2,3,6,7,8-HXCDF	7.55		0.0620	4.93	ng/kg	B			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013																												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5		SO	7_DG		7026478	LL	8015M	4/23/2013	PH033	2.9	1	PHCC15C20	EFH (C15-C20)	2.3	J	2.1	5.1	mg/kg	J	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8015M	4/23/2013	PH033	2.9	1	PHCC21C30	EFH (C21-C30)	19		2.1	5.1	mg/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8015M	4/23/2013	PH033	2.9	1	PHCC30C40	EFH (C30-C40)	98		4.1	10	mg/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8015M	4/23/2013	PH033	2.9	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.1	5.1	mg/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	11097-69-1	Aroclor 1254	44		4.5	17	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8082A	4/23/2013	PH033	2.9	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.2	18	ug/kg	J	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	117-84-0	Di-n-octylphthalate	18	U	6.2	18	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	120-12-7	ANTHRACENE	0.71	J	0.34	1.7	ug/kg	J	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	129-00-0	PYRENE	9.8		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	191-24-2	BENZO(G,H,I)PERYLENE	3.1		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	192-97-2	Benzo(e)pyrene	5.4	J	3.4	17	ug/kg	J	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	193-39-5	INDENO(1,2,3-CD)PYRENE	2.7		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	205-99-2	BENZO(B)FLUORANTHENE	17		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	206-44-0	FLUORANTHENE	11		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	207-08-9	BENZO(K)FLUORANTHENE	11		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	218-01-9	Chrysene	8.4		0.34	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	50-32-8	BENZO(A)PYRENE	5.8		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.3	J	0.68	1.7	ug/kg	J	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	56-55-3	BENZO(A)ANTHRACENE	4.8		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	84-66-2	DIETHYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	84-74-2	Di-n-butylphthalate	18	U	6.2	18	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	85-01-8	PHENANTHRENE	3.9		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	86-73-7	FLUORENE	1.4	J	0.68	1.7	ug/kg	J	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	90-12-0	1-METHYLNAPHTHALENE	0.98	J	0.68	1.7	ug/kg	J	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	91-20-3	NAPHTHALENE	2.3		0.68	1.7	ug/kg				1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	8270D SIM	4/29/2013	PH033	2.9	1	91-57-6	2-METHYLNAPHTHALENE	1.6	J	0.68	1.7	ug/kg	J	J	Z	1785749.205	268256.178	-118.70977	34.235065
SL-505-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026478	LL	9045M	4/18/2013	PH033	2.9	1	pH	PH	7.2		0.0100	0.0100	pH unit							



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-09-7	POTASSIUM	3300	J	13.7	102	mg/kg		J	Q	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-23-5	SODIUM	102	U	17.0	102	mg/kg	J	U	F	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-31-5	TIN	10.2	U	0.224	10.2	mg/kg	J	U	B	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-32-6	TITANIUM METAL POWDER	1100		0.173	1.02	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-36-0	ANTIMONY	0.665	J	0.509	4.07	mg/kg	J	J	Q, Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-38-2	ARSENIC	4.38		0.336	4.07	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-39-3	BARIUM	78		0.0336	1.02	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-41-7	BERYLLIUM	0.491	J	0.0681	1.02	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-42-8	BORON	10.2	U	0.844	10.2	mg/kg		U	F	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-43-9	CADMIUM	0.27	J	0.0336	1.02	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-47-3	CHROMIUM	16.5		0.0895	3.05	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-48-4	COBALT	4.54	J	0.0915	1.02	mg/kg		J	E	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-50-8	COPPER	12.5		0.183	2.03	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-62-2	VANADIUM (FUME OR DUST)	33.1		0.112	1.02	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-66-6	ZINC	91.2		0.203	4.07	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-67-7	ZIRCONIUM	2.87	J	0.844	5.09	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7440-70-2	CALCIUM METAL	3400	J	4.09	20.3	mg/kg		J	E	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7723-14-0	PHOSPHORUS	427	J	0.519	10.2	mg/kg		J	E, A	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6020A	5/6/2013	PH040	3.6	2	7782-49-2	SELENIUM	0.143	J	0.102	0.407	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6020A	5/6/2013	PH040	3.6	2	7440-22-4	SILVER	0.0337	J	0.0203	0.203	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6020A	5/6/2013	PH040	3.6	2	7440-24-6	STRONTIUM	19.3		0.0346	0.407	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6020A	5/6/2013	PH040	3.6	2	7440-28-0	THALLIUM	0.283		0.0305	0.203	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	7471B	5/3/2013	PH040	3.6	1	7439-97-6	MERCURY	0.0118	J	0.0098	0.0163	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8015M	5/2/2013	PH040	3.6	5	PHCC12C14	EFH (C12-C14)	26	U	10	26	mg/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8015M	5/2/2013	PH040	3.6	5	PHCC15C20	EFH (C15-C20)	26	U	10	26	mg/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8015M	5/2/2013	PH040	3.6	5	PHCC21C30	EFH (C21-C30)	48		10	26	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8015M	5/2/2013	PH040	3.6	5	PHCC30C40	EFH (C30-C40)	130	J	21	52	mg/kg		J	L	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8015M	5/2/2013	PH040	3.6	5	PHCC8C11	EFH (C8-C11)	26	U	10	26	mg/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	11126-42-4	Aroclor 5460	34	UJ	10	34	ug/kg		UJ	E	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	12642-23-8	Aroclor 5442	34	UJ	10	34	ug/kg		UJ	E	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8082A	5/3/2013	PH040	3.6	1	63496-31-1	Aroclor 5432	34	UJ	10	34	ug/kg		UJ	E	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8270D SIM	5/1/2013	PH040	3.6	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	190	U	62	190	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8270D SIM	5/1/2013	PH040	3.6	10	117-84-0	Di-n-octylphthalate	190	U	62	190	ug/kg		U		1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	8270D SIM	5/1/2013	PH040	3.6	10	120-12-7	ANTHRACENE	17	U	3.5	17	ug/kg							



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	1613B	5/7/2013	PH040	2.9	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	7.59		0.0620	5.01	ng/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	1613B	5/7/2013	PH040	2.9	1	60851-34-5	2,3,4,6,7,8-HXCDF	1.52	J	0.0604	5.01	ng/kg	JB	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	1613B	5/7/2013	PH040	2.9	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	27.1		0.0571	5.01	ng/kg	B			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	1613B	5/7/2013	PH040	2.9	1	70648-26-9	1,2,3,4,7,8-HXCDF	1.77	J	0.0604	5.01	ng/kg	JB	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	1613B	5/7/2013	PH040	2.9	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.745	J	0.0617	5.01	ng/kg	JB	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	1613B	5/7/2013	PH040	2.9	1	TCDD TEQ	TCDD TEQ	6.54		0	0	ng/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7429-90-5	ALUMINUM (FUME OR DUST)	12100		7.94	41.2	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7439-89-6	IRON	20500		3.91	41.2	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7439-92-1	LEAD	15.8	J	0.484	3.09	mg/kg		J	E, Q	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7439-93-2	LITHIUM	25.1		0.57	4.1	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7439-95-4	MAGNESIUM	4340		1.78	10.3	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7439-96-5	MANGANESE	284		0.0855	1.03	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7439-98-7	MOLYBDENUM	2.06	U	0.175	2.06	mg/kg	J	U	F	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-02-0	NICKEL	13.8	J	0.113	2.06	mg/kg		J	A	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-09-7	POTASSIUM	3150	J	13.9	103	mg/kg		J	Q	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-23-5	SODIUM	103	U	17.2	103	mg/kg	J	U	F	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-31-5	TIN	10.3	U	0.227	10.3	mg/kg	J	U	B	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-32-6	TITANIUM METAL POWDER	1100		0.175	1.03	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-36-0	ANTIMONY	0.557	J	0.515	4.12	mg/kg	J	J	Q, Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-38-2	ARSENIC	4.22		0.340	4.12	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-39-3	BARIUM	85.4		0.0340	1.03	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-41-7	BERYLLIUM	0.487	J	0.0690	1.03	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-42-8	BORON	10.3	U	0.855	10.3	mg/kg	J	U	F	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-43-9	CADMIUM	0.399	J	0.0340	1.03	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-47-3	CHROMIUM	18.6	J	0.0906	3.09	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-48-4	COBALT	4.5	J	0.0927	1.03	mg/kg		J	E	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-50-8	COPPER	11.6		0.185	2.06	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-62-2	VANADIUM (FUME OR DUST)	35.4		0.113	1.03	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-66-6	ZINC	129		0.206	4.12	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-67-7	ZIRCONIUM	2.56	J	0.855	5.15	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7440-70-2	CALCIUM METAL	3250	J	4.14	20.6	mg/kg		J	E	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6010C	5/3/2013	PH040	2.9	1	7723-14-0	PHOSPHORUS	370	J	0.525	10.3	mg/kg		J	E, A	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6020A	5/6/2013	PH040	2.9	2	7782-49-2	SELENIUM	0.145	J	0.103	0.412	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6020A	5/6/2013	PH040	2.9	2	7440-22-4	SILVER	0.0694	J	0.0206	0.206	mg/kg	J	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6020A	5/6/2013	PH040	2.9	2	7440-24-6	STRONTIUM	17.5		0.0350	0.412	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	6020A	5/6/2013	PH040	2.9	2	7440-28-0	THALLIUM	0.238		0.0309	0.206	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	7471B	5/2/2013	PH040	2.9	1	7439-97-6	MERCURY	0.0163	U	0.0098	0.0163	mg/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8015M	5/2/2013	PH040	2.9	5	PHCC12C14	EFH (C12-C14)	26	U	10	26	mg/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8015M	5/2/2013	PH040	2.9	5	PHCC15C20	EFH (C15-C20)	26	U	10	26	mg/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8015M	5/2/2013	PH040	2.9	5	PHCC21C30	EFH (C21-C30)	82		10	26	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8015M	5/2/2013	PH040	2.9	5	PHCC30C40	EFH (C30-C40)	220	J	21	51	mg/kg		J	L	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-2.0-3.0	4/26/2013	N	2	3	ft	SO	7_DG		7037620	LL	8015M	5/2/2013	PH040	2.9	5	PHCC8C11	EFH (C8-C11)	26	U	10	26	mg/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	8082A	4/20/2013	PH028	2.2	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785377.142	267766.452	-118.71	



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	76.3		0.0633	4.97	ng/kg	B			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	39001-02-0	OCDF	20.5		0.0481	9.94	ng/kg	B			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.02	J	0.0563	4.97	ng/kg	JBQ	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.596	J	0.0665	4.97	ng/kg	JB	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.994	U	0.0576	0.994	ng/kg	U			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	1.05	J	0.0492	4.97	ng/kg	JB	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	57117-31-4	2,3,4,7,8-PCDF	4.97	U	0.0338	4.97	ng/kg	JBQ	U	B	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.235	J	0.0325	4.97	ng/kg	JBQ	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.595	J	0.0471	4.97	ng/kg	JBQ	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	3.24	J	0.0595	4.97	ng/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.909	J	0.0504	4.97	ng/kg	JBQ	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	10.2		0.0297	4.97	ng/kg	B			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.516	J	0.0548	4.97	ng/kg	JB	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	4.97	U	0.0607	4.97	ng/kg	U			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	1613B	4/15/2013	PH028	1.6	1	TCDD TEQ	TCDD TEQ	2.07		0	0	ng/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7429-90-5	ALUMINUM (FUME OR DUST)	9600		7.68	39.9	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7439-89-6	IRON	18500		3.79	39.9	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7439-92-1	LEAD	5.75		0.468	2.99	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7439-93-2	LITHIUM	24.7		0.55	4.0	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7439-95-4	MAGNESIUM	3650		1.72	9.96	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7439-96-5	MANGANESE	255		0.0827	0.996	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7439-98-7	MOLYBDENUM	0.403	J	0.169	1.99	mg/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-02-0	NICKEL	6.27		0.110	1.99	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-09-7	POTASSIUM	3750	J	13.5	99.6	mg/kg		J	Q	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-23-5	SODIUM	56.7	J	16.6	99.6	mg/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-31-5	TIN	9.96	U	0.219	9.96	mg/kg	J	U	B	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-32-6	TITANIUM METAL POWDER	999		0.169	0.996	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-36-0	ANTIMONY	1.41	J	0.498	3.99	mg/kg	J	J	Q, Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-38-2	ARSENIC	1.72	J	0.329	3.99	mg/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-39-3	BARIUM	71.2		0.0329	0.996	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-41-7	BERYLLIUM	0.408	J	0.0668	0.996	mg/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-42-8	BORON	4.15	J	0.827	9.96	mg/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-43-9	CADMIUM	0.448	J	0.0329	0.996	mg/kg	J	J	Z	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-47-3	CHROMIUM	12		0.0877	2.99	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-48-4	COBALT	4.53		0.0897	0.996	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-50-8	COPPER	4.26		0.179	1.99	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-62-2	VANADIUM (FUME OR DUST)	23.6		0.110	0.996	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-66-6	ZINC	61.4		0.199	3.99	mg/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-67-7	ZIRCONIUM	4.98	U	0.827	4.98	mg/kg	U			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7440-70-2	CALCIUM METAL	2230	J	4.01	19.9	mg/kg		J	E	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6010C	4/21/2013	PH028	1.6	1	7723-14-0	PHOSPHORUS	406	J	0.508	9.96	mg/kg		J	Q	1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	6020A	4/21/2013	PH028	1.6	2	7440-22-4	SILVER	0.0315	J	0.0199	0.199	mg/kg	J	J	Z	1785025.732	2		



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	85-01-8	PHENANTHRENE	3.3		0.68	1.7	ug/kg				1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785025.732	267878.559	-118.71215	34.234013
SL-548-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018436	LL	8270D SIM	4/23/2013	PH028	1.6	1	86-73-7	FLUORENE	1.7	U	0.68	1.7	ug/kg	U			1785025.732	267878.559	-118.71215	34.234013
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-02-0	NICKEL	10.8		0.114	2.06	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-09-7	POTASSIUM	2920	J	13.9	103	mg/kg		J	Q	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-23-5	SODIUM	82	J	17.2	103	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-31-5	TIN	10.3	U	0.227	10.3	mg/kg	J	U	B	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-32-6	TITANIUM METAL POWDER	1080		0.175	1.03	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-36-0	ANTIMONY	2.08	J	0.516	4.13	mg/kg	J	J	Q, Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-38-2	ARSENIC	3.18	J	0.341	4.13	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-39-3	BARIUM	90.5		0.0341	1.03	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-41-7	BERYLLIUM	0.673	J	0.0691	1.03	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-42-8	BORON	3.55	J	0.857	10.3	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-43-9	CADMIUM	0.467	J	0.0341	1.03	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-47-3	CHROMIUM	21.3		0.0908	3.10	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-48-4	COBALT	6.51		0.0929	1.03	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-50-8	COPPER	7.9		0.186	2.06	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-62-2	VANADIUM (FUME OR DUST)	36		0.114	1.03	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-66-6	ZINC	53.9		0.206	4.13	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-67-7	ZIRCONIUM	1.37	J	0.857	5.16	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7440-70-2	CALCIUM METAL	2990		4.15	20.6	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7723-14-0	PHOSPHORUS	363	J	0.526	10.3	mg/kg		J	Q	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6020A	4/21/2013	PH032	5	2	7782-49-2	SELENIUM	0.413	U	0.103	0.413	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6020A	4/21/2013	PH032	5	2	7440-22-4	SILVER	0.0625	J	0.0206	0.206	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6020A	4/21/2013	PH032	5	2	7440-24-6	STRONTIUM	19.7		0.0351	0.413	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6020A	4/21/2013	PH032	5	2	7440-28-0	THALLIUM	0.273		0.0310	0.206	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	7471B	4/18/2013	PH032	5	1	7439-97-6	MERCURY	0.0172	J	0.0107	0.0208	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8015M	4/23/2013	PH032	5	20	PHCC12C14	EFH (C12-C14)	110	U	42	110	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8015M	4/23/2013	PH032	5	20	PHCC15C20	EFH (C15-C20)	110	U	42	110	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8015M	4/23/2013	PH032	5	20	PHCC21C30	EFH (C21-C30)	84	J	42	110	mg/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8015M	4/23/2013	PH032	5	20	PHCC30C40	EFH (C30-C40)	420		84	210	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8015M	4/23/2013	PH032	5	20	PHCC8C11	EFH (C8-C11)	110	U	42	110	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8015M	4/19/2013	PH032	5	26.6	GROCS12	GASOLINE RANGE ORGANICS (C5-C12)	1.1	U	0.2	1.1	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8082A	4/23/2013	PH032	5	1	11096-82-5	Aroclor 1260	18	U	4.0	18	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8082A	4/23/2013	PH032	5	1	11097-69-1	Aroclor 1254	12	J	4.6	18	ug/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8082A	4/23/2013	PH032	5	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8082A	4/23/2013	PH032	5	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8082A	4/23/2013	PH032	5	1	11126-42-4	Aroclor 5460	15	J	10	34	ug/kg	J	J	Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8082A	4/23/2013	PH032	5	1	11141-16-5	Aroclor 1232	18	U	4.2	18	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	8082A	4/23/2013	PH032	5	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft																								



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	39001-02-0	OCDF	57.9		0.0678	10.1	ng/kg	B			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.65	J	0.0530	5.04	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.937	J	0.0599	5.04	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.191	J	0.0378	1.01	ng/kg	JQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	2.05	J	0.0579	5.04	ng/kg	JBQ	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	57117-31-4	2,3,4,7,8-PECDF	0.45	J	0.0247	5.04	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.495	J	0.0253	5.04	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.83	J	0.0475	5.04	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	7.63		0.0524	5.04	ng/kg	B			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	60851-34-5	2,3,4,6,7,8-HXCDF	1.2	J	0.0490	5.04	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	23		0.0284	5.04	ng/kg	B			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.856	J	0.0527	5.04	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.355	J	0.0668	5.04	ng/kg	JB	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	1613B	4/19/2013	PH032	5	1	TCDD TEQ	TCDD TEQ	5.87		0	0	ng/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7429-90-5	ALUMINUM (FUME OR DUST)	15900		7.96	41.3	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7439-89-6	IRON	22100		3.92	41.3	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7439-92-1	LEAD	30.2		0.485	3.10	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7439-93-2	LITHIUM	19.5		0.57	4.1	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7439-95-4	MAGNESIUM	4410		1.79	10.3	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7439-96-5	MANGANESE	297		0.0857	1.03	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7439-98-7	MOLYBDENUM	2.06	U	0.175	2.06	mg/kg	J	U	F, B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-02-0	NICKEL	9.38		0.114	2.06	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-09-7	POTASSIUM	3210	J	13.9	103	mg/kg		J	Q	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-23-5	SODIUM	99.7	J	17.2	103	mg/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-31-5	TIN	10.3	U	0.227	10.3	mg/kg	J	U	B	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-32-6	TITANIUM METAL POWDER	1170		0.175	1.03	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-36-0	ANTIMONY	1.91	J	0.516	4.13	mg/kg	J	J	Q, Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-38-2	ARSENIC	2.31	J	0.341	4.13	mg/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-39-3	BARIUM	99.2		0.0341	1.03	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-41-7	BERYLLIUM	0.579	J	0.0691	1.03	mg/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-42-8	BORON	4.59	J	0.857	10.3	mg/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-43-9	CADMIUM	0.445	J	0.0341	1.03	mg/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-47-3	CHROMIUM	18.7		0.0908	3.10	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-48-4	COBALT	6.2		0.0929	1.03	mg/kg				1784525.385	267430.268	-118.7138	34.232772
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	39001-02-0	OCDF	96.4		0.0283	10.4	ng/kg	B			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	4.09	J	0.0449	5.18	ng/kg	JB	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	1.94	J	0.0624	5.18	ng/kg	JB	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.972	J	0.0855	1.04	ng/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	3.99	J	0.0556	5.18	ng/kg	JB	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	57117-31-4	2,3,4,7,8-PECDF	1.77	J	0.0387	5.18	ng/kg	JB	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	1.52	J	0.0390	5.18	ng/kg	JB	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	57117-44-9	1,2,3,6,7,8-HXCDF	1.89	J	0.0422	5.18	ng/kg	JB	J	Z	1785816.004	268167.926	-118	



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	117-84-0	Di-n-octylphthalate	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	120-12-7	ANTHRACENE	1.8	U	0.35	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	129-00-0	PYRENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	191-24-2	BENZO(G,H,I)PERYLENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	205-99-2	BENZO(B)FLUORANTHENE	1	J	0.70	1.8	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	206-44-0	FLUORANTHENE	0.79	J	0.70	1.8	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	207-08-9	BENZO(K)FLUORANTHENE	3.9		0.70	1.8	ug/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	208-96-8	ACENAPHTHYLENE	1.8	U	0.35	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	218-01-9	Chrysene	0.72	J	0.35	1.8	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	50-32-8	BENZO(A)PYRENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	56-55-3	BENZO(A)ANTHRACENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	83-32-9	ACENAPHTHENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	84-66-2	DIETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	84-74-2	Di-n-butylphthalate	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	85-01-8	PHENANTHRENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	85-68-7	BENZYL BUTYL PHTHALATE	7.9	J	6.3	19	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	86-73-7	FLUORENE	0.98	J	0.70	1.8	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	90-12-0	1-METHYLNAPHTHALENE	0.73	J	0.70	1.8	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	91-20-3	NAPHTHALENE	1.8	U	0.70	1.8	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	8270D SIM	5/1/2013	PH038	4.9	1	91-57-6	2-METHYLNAPHTHALENE	0.99	J	0.70	1.8	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	9045M	4/26/2013	PH038	4.9	1	pH	PH	7.06		0.0100	0.0100	pH unit				1785630.291	268055.856	-118.71015	34.234512
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	160.3M	5/1/2013	PH038	3.6	1	MOIST	MOISTURE	3.6		0.10	0.10	%				1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	1746-01-6	2,3,7,8-TCDD	0.0353	J	0.0264	1.03	ng/kg	JQ	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.373	J	0.0384	5.17	ng/kg	JB	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	3268-87-9	OCDD	89.5		0.0244	10.3	ng/kg	B			1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	8.96		0.0294	5.17	ng/kg	B			1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	39001-02-0	OCDF	3.64	J	0.0228	10.3	ng/kg	JB	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.215	J	0.0381	5.17	ng/kg	J	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.14	J	0.0328	5.17	ng/kg	J	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.214	J	0.0470	1.03	ng/kg	JO	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.143	J	0.0407	5.17	ng/kg	JB	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	57117-31-4	2,3,4,7,8-PECDF	0.433	J	0.0245	5.17	ng/kg	JB	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.254	J	0.0245	5.17	ng/kg	JB	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.197	J	0.0251	5.17	ng/kg	JB	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.46	J	0.0382	5.17	ng/kg	J	J	Z	1785466.394	268066.298	-118.71017	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	1613B	5/2/2013	PH038	3.6	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.206	J	0.0247	5.17	ng/kg							



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8015M	5/2/2013	PH038	3.6	1	PHCC21C30	EFH (C21-C30)	5.6		2.1	5.2	mg/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8015M	5/2/2013	PH038	3.6	1	PHCC30C40	EFH (C30-C40)	7.8	J	4.1	10	mg/kg	J	J	L, Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8015M	5/2/2013	PH038	3.6	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8082A	4/27/2013	PH038	3.6	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	22		6.2	19	ug/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	120-12-7	ANTHRACENE	0.42	J	0.35	1.7	ug/kg	J	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	129-00-0	PYRENE	2.6		0.69	1.7	ug/kg				1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785466.394	268066.298	-118.7107	34.234538
SL-527-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034502	LL	8270D SIM	5/1/2013	PH038	3.6	1	191-24-2	BENZO(G,H,I)PERYLENE	1.2	J	0.69	1.7	ug/kg	J	J	Z	1785466.394	268066.298	-118.7107	34.234538
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	85-01-8	PHENANTHRENE	0.68	J	0.67	1.7	ug/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	86-73-7	FLUORENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	91-20-3	NAPHTHALENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	9045M	4/12/2013	PH029	1.1	1	pH	PH	7.9		0.0100	0.0100	pH unit				1784846.755	267791.858	-118.71274	34.233771
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	160.3M	4/16/2013	PH029	3.6	1	MOIST	MOISTURE	3.6		0.10	0.10	%				1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	1746-01-6	2,3,7,8-TCDD	1.03	U	0.0294	1.03	ng/kg	JB	U	B	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	1.41	J	0.0331	5.13	ng/kg	J	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	3268-87-9	OCDD	455		0.0422	10.3	ng/kg	B			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	36.8		0.0355	5.13	ng/kg	B			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	39001-02-0	OCDF	12.8		0.0317	10.3	ng/kg	B			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.627	J	0.0336	5.13	ng/kg	JB	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.441	J	0.0407	5.13	ng/kg	J	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.389	J	0.0823	1.03	ng/kg	J	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.599	J	0.0483	5.13	ng/kg	JB	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	57117-31-4	2,3,4,7,8-PECDF	0.865	J	0.0339	5.13	ng/kg	JB	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.294	J	0.0380	5.13	ng/kg	JB	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	1613B	4/17/2013	PH029	3.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.356	J	0.0296	5.13	ng/kg	JB	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft																								



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8015M	4/19/2013	PH029	3.6	100	PHCC15C20	EFH (C15-C20)	520	U	210	520	mg/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8015M	4/19/2013	PH029	3.6	100	PHCC21C30	EFH (C21-C30)	1500		210	520	mg/kg				1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8015M	4/19/2013	PH029	3.6	100	PHCC30C40	EFH (C30-C40)	4100		410	1000	mg/kg				1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8015M	4/19/2013	PH029	3.6	100	PHCC8C11	EFH (C8-C11)	520	U	210	520	mg/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8082A	4/20/2013	PH029	3.6	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	190	U	62	190	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	117-84-0	Di-n-octylphthalate	190	U	62	190	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	120-12-7	ANTHRACENE	17	U	3.5	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	129-00-0	PYRENE	8.3	J	6.9	17	ug/kg	J	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	131-11-3	DIMETHYL PHTHALATE	190	U	62	190	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	191-24-2	BENZO(G,H,I)PERYLENE	35		6.9	17	ug/kg				1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	192-97-2	Benzo(e)pyrene	80	J	35	180	ug/kg	J	J	Z	1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	193-39-5	INDENO(1,2,3-CD)PYRENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	205-99-2	BENZO(B)FLUORANTHENE	68		6.9	17	ug/kg				1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	206-44-0	FLUORANTHENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	207-08-9	BENZO(K)FLUORANTHENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	208-96-8	ACENAPHTHYLENE	17	U	3.5	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	218-01-9	Chrysene	17	U	3.5	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	50-32-8	BENZO(A)PYRENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	53-70-3	DIBENZO(A,H)ANTHRACENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	56-55-3	BENZO(A)ANTHRACENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	83-32-9	ACENAPHTHENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	84-66-2	DIETHYL PHTHALATE	190	U	62	190	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	84-74-2	Di-n-butylphthalate	190	U	62	190	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	85-01-8	PHENANTHRENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	85-68-7	BENZYL BUTYL PHTHALATE	190	U	62	190	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	86-73-7	FLUORENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	90-12-0	1-METHYLNAPHTHALENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	91-20-3	NAPHTHALENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	8270D SIM	4/23/2013	PH029	3.6	10	91-57-6	2-METHYLNAPHTHALENE	17	U	6.9	17	ug/kg	U			1784777.809	267627.958	-118.71296	34.23332
SL-554-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020346	LL	9045M	4/12/2013	PH029	3.6	1	pH		7.18		0.0100	0.0100	pH unit				1784777.809			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8082A	4/22/2013	PH030	4.4	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8082A	4/22/2013	PH030	4.4	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8082A	4/22/2013	PH030	4.4	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8082A	4/22/2013	PH030	4.4	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8015M	4/16/2013	PH030	4.4	25.25	GROCC5C12	GASOLINE RANGE ORGANICS (C5-C12)	1.1	U	0.2	1.1	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8015M	4/19/2013	PH030	4.4	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8015M	4/19/2013	PH030	4.4	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8015M	4/19/2013	PH030	4.4	1	PHCC21C30	EFH (C21-C30)	5.2	U	2.1	5.2	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8015M	4/19/2013	PH030	4.4	1	PHCC30C40	EFH (C30-C40)	10	U	4.2	10	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8015M	4/19/2013	PH030	4.4	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	7471B	4/18/2013	PH030	4.4	1	7439-97-6	MERCURY	0.0149	J	0.0108	0.0208	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6020A	4/21/2013	PH030	4.4	2	7440-22-4	SILVER	0.026	J	0.0203	0.203	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6020A	4/21/2013	PH030	4.4	2	7440-24-6	STRONTIUM	15		0.0345	0.406	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6020A	4/21/2013	PH030	4.4	2	7440-28-0	THALLIUM	0.273		0.0305	0.203	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6020A	4/21/2013	PH030	4.4	2	7782-49-2	SELENIUM	0.119	J	0.102	0.406	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7429-90-5	ALUMINUM (FUME OR DUST)	13400		7.83	40.6	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7439-89-6	IRON	22500		3.86	40.6	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7439-92-1	LEAD	6.56		0.477	3.05	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7439-93-2	LITHIUM	25.9		0.56	4.1	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7439-95-4	MAGNESIUM	5060		1.76	10.2	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7439-96-5	MANGANESE	347		0.0843	1.02	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7439-98-7	MOLYBDENUM	2.03	U	0.173	2.03	mg/kg	J	U	F	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-02-0	NICKEL	11.6		0.112	2.03	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-09-7	POTASSIUM	3650	J	13.7	102	mg/kg		J	Q	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-23-5	SODIUM	71.3	J	17.0	102	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-31-5	TIN	10.2	U	0.223	10.2	mg/kg	J	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-32-6	TITANIUM METAL POWDER	1210		0.173	1.02	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-36-0	ANTIMONY	2.1	J	0.508	4.06	mg/kg	J	J	Q, Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-38-2	ARSENIC	2.2	J	0.335	4.06	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-39-3	BARIUM	82.8		0.0335	1.02	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-41-7	BERYLLIUM	0.546	J	0.0680	1.02	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-42-8	BORON	2.37	J	0.843	10.2	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-43-9	CADMIUM	0.511	J	0.0335	1.02	mg/kg	J	J	Z	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-47-3	CHROMIUM	27.8		0.0894	3.05	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-48-4	COBALT	6.43		0.0914	1.02	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-50-8	COPPER	6.96		0.183	2.03	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-62-2	VANADIUM (FUME OR DUST)	37		0.112	1.02	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-66-6	ZINC	60.5		0.203	4.06	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-67-7	ZIRCONIUM	5.08	U	0.843	5.08	mg/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7440-70-2	CALCIUM METAL	2890		4.08	20.3	mg/kg				1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	6010C	4/21/2013	PH030	4.4	1	7723-14-0	PHOSPHORUS	470	J	0.518	10.2	mg/kg		J	Q	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	1613B	4/18/2013	PH030	4.4	1	1746-01-6	2,3,7,8-TCDD	1.04	U	0.0235	1.04	ng/kg	JBQ	U	B	1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	1613B	4/18/2013	PH030	4.4	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBEN												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8270D SIM	4/25/2013	PH030	4.1	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8270D SIM	4/25/2013	PH030	4.1	1	85-01-8	PHENANTHRENE	1.7	U	0.69	1.7	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8270D SIM	4/25/2013	PH030	4.1	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8270D SIM	4/25/2013	PH030	4.1	1	86-73-7	FLUORENE	1.7	U	0.69	1.7	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8270D SIM	4/25/2013	PH030	4.1	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8270D SIM	4/25/2013	PH030	4.1	1	91-20-3	NAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8270D SIM	4/25/2013	PH030	4.1	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-4.0-5.0	4/12/2013	N	4	5	ft	SO	7_DG		7022150	LL	8082A	4/22/2013	PH030	4.1	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	218-01-9	Chrysene	8.5		0.34	1.7	ug/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	50-32-8	BENZO(A)PYRENE	7.5		0.68	1.7	ug/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	53-70-3	DIBENZO(A,H)ANTHRACENE	0.99	J	0.68	1.7	ug/kg	J	J	Z	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	56-55-3	BENZO(A)ANTHRACENE	6.3		0.68	1.7	ug/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	83-32-9	METHANAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	85-01-8	PHENANTHRENE	4.2		0.68	1.7	ug/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	86-73-7	FLUORENE	1.7	U	0.68	1.7	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	91-20-3	NAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	9045M	4/18/2013	PH033	1.6	1	pH	PH	6.95		0.0100	0.0100	pH unit				1785751.574	268418.621	-118.70976	34.235511
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	160.3M	4/25/2013	PH033	3.3	1	MOIST	MOISTURE	3.3		0.10	0.10	%				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	1746-01-6	2,3,7,8-TCDD	0.0442	J	0.0245	1.02	ng/kg	JQ	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.746	J	0.0404	5.08	ng/kg	JB	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	3268-87-9	OCDD	248		0.0397	10.2	ng/kg	B			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	25.7		0.0636	5.08	ng/kg	B			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	39001-02-0	OCDF	7.16	J	0.0274	10.2	ng/kg	JB	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.926	J	0.0424	5.08	ng/kg	JB	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.277	J	0.0414	5.08	ng/kg	JB	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.653	J	0.0638	1.02	ng/kg	J	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.448	J	0.0304	5.08	ng/kg	JB	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	1613B	4/22/2013	PH033	3.3	1	57117-31-4	2,3,4,7,8-PECDF	0.984	J	0.0341	5.08	ng/kg	JB	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG																						



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	7471B	4/23/2013	PH033	3.3	1	7439-97-6	MERCURY	0.0196	J	0.0104	0.0201	mg/kg	J	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8015M	4/23/2013	PH033	3.3	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8015M	4/23/2013	PH033	3.3	1	PHCC15C20	EFH (C15-C20)	2.1	J	2.1	5.2	mg/kg	J	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8015M	4/23/2013	PH033	3.3	1	PHCC21C30	EFH (C21-C30)	11		2.1	5.2	mg/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8015M	4/23/2013	PH033	3.3	1	PHCC30C40	EFH (C30-C40)	27		4.1	10	mg/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8015M	4/23/2013	PH033	3.3	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	11097-69-1	Aroclor 1254	18		4.5	17	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	11126-42-4	Aroclor 5460	24	J	10	34	ug/kg	J	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8082A	4/23/2013	PH033	3.3	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.2	19	ug/kg	J	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	120-12-7	ANTHRACENE	0.92	J	0.34	1.7	ug/kg	J	J	Z	1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	129-00-0	PYRENE	46		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	191-24-2	BENZO(G,H,I)PERYLENE	8.3		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	192-97-2	Benzo(e)pyrene	20		3.4	18	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	193-39-5	INDENO(1,2,3-CD)PYRENE	8.7		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	205-99-2	BENZO(B)FLUORANTHENE	58		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	206-44-0	FLUORANTHENE	46		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	207-08-9	BENZO(K)FLUORANTHENE	23		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	218-01-9	Chrysene	32		0.34	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	50-32-8	BENZO(A)PYRENE	29		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	53-70-3	DIBENZO(A,H)ANTHRACENE	2.8		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	56-55-3	BENZO(A)ANTHRACENE	35		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	85-01-8	PHENANTHRENE	5.2		0.69	1.7	ug/kg				1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	86-73-7	FLUORENE	1.7	U	0.69	1.7	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785767.122	268341.007	-118.70971	34.235298
SL-502-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026479	LL	8270D SIM	4/29/2013	PH033	3.3	1	91-20-3	NAPHTHALENE	1.2	J	0.69	1.7	ug/kg	J	J	Z				



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	85-01-8	PHENANTHRENE	0.95	J	0.69	1.7	ug/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	85-68-7	BENZYL BUTYL PHTHALATE	12	J	6.2	19	ug/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	86-73-7	FLUORENE	0.86	J	0.69	1.7	ug/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	91-20-3	NAPHTHALENE	1.1	J	0.69	1.7	ug/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	8270D SIM	4/30/2013	PH034	3.6	1	91-57-6	2-METHYLNAPHTHALENE	0.86	J	0.69	1.7	ug/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	9045M	4/19/2013	PH034	3.6	1	pH	PH	6.99		0.0100	0.0100	pH unit				1785230.391	268010.77	-118.71148	34.23438
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	160.3M	5/1/2013	PH040	2.1	1	MOIST	MOISTURE	2.1		0.10	0.10	%				1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	11126-42-4	Aroclor 5460	33	UJ	10	33	ug/kg	U	UJ	E	1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	12642-23-8	Aroclor 5442	33	UJ	10	33	ug/kg	U	UJ	E	1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785230.109	267705.467	-118.71147	34.233541
SL-543A-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037614	LL	8082A	5/3/2013	PH040	2.1	1	63496-31-1	Aroclor 5432	33	UJ	10	33	ug/kg	U	UJ	E	1785230.109	267705.467	-118.71147	34.233541
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	160.3M	5/1/2013	PH040	2.2	1	MOIST	MOISTURE	2.2		0.10	0.10	%				1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	11126-42-4	Aroclor 5460	33	UJ	10	33	ug/kg	U	UJ	E	1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	12642-23-8	Aroclor 5442	33	UJ	10	33	ug/kg	U	UJ	E	1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785239.64	267702.69	-118.71144	34.233534
SL-543B-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037615	LL	8082A	5/3/2013	PH040	2.2	1	63496-31-1	Aroclor 5432	33	UJ	10	33	ug/kg	U	UJ	E	1785239.64	267702.69	-118.71144	34.233534
SL-543C-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037616	LL	160.3M	5/1/2013	PH040	2.5	1	MOIST	MOISTURE	2.5		0.10	0.10	%				1785235.9	267693.321	-118.71145	34.233508
SL-543C-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037616	LL	8082A	5/3/2013	PH040	2.5	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785235.9	267693.321	-118.71145	34.233508
SL-543C-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037616	LL	8082A	5/3/2013	PH040	2.5	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1785235.9	267693.321	-118.71145	34.233508
SL-543C-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037616	LL	8082A	5/3/2013	PH040	2.5	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785235.9	267693.321	-118.71145	34.233508
SL-543C-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7037616	LL	8082A	5/3/2013	PH040	2.5	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785235.9	267693		



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	1613B	5/7/2013	PH040	3.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.813	J	0.0513	5.09	ng/kg	JB	J	Z	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	1613B	5/7/2013	PH040	3.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.09	U	0.0352	5.09	ng/kg	U			1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	1613B	5/7/2013	PH040	3.6	1	TCDD TEQ	TCDD TEQ	3.84		0	0	ng/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7429-90-5	ALUMINUM (FUME OR DUST)	12600		7.84	40.7	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7439-89-6	IRON	20300		3.86	40.7	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7439-92-1	LEAD	10.5	J	0.478	3.05	mg/kg		J	E, Q	1785257.349	267688.605	-118.71138	34.233496
SL-562-SA7-SB-0.0-0.5	4/26/2013	N	0	0.5	ft	SO	7_DG		7037619	LL	6010C	5/3/2013	PH040	3.6	1	7439-93-2	LITHIUM	24.1		0.56	4.1	mg/kg				1785257.349	267688.605	-118.71138	34.233496
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-36-0	ANTIMONY	3.99	UJ	0.499	3.99	mg/kg	U	UJ	Q	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-38-2	ARSENIC	4.74		0.329	3.99	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-39-3	BARIUM	73.5		0.0329	0.998	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-41-7	BERYLLIUM	0.998	U	0.0669	0.998	mg/kg	J	U	B	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-43-9	CADMIUM	0.998	U	0.0329	0.998	mg/kg	J	U	B	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-47-3	CHROMIUM	15.4		0.0878	2.99	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-48-4	COBALT	4		0.0898	0.998	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-50-8	COPPER	6.02		0.180	2.00	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-62-2	VANADIUM (FUME OR DUST)	32		0.110	0.998	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-66-6	ZINC	52.3		0.200	3.99	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-67-7	ZIRCONIUM	4.99	UJ	0.828	4.99	mg/kg	U	UJ	FD	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-70-2	CALCIUM METAL	2670	J	4.01	20.0	mg/kg		J	E	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6010C	4/19/2013	PH027	2.7	1	7723-14-0	PHOSPHORUS	426	J	0.509	9.98	mg/kg		J	O	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6020A	4/21/2013	PH027	2.7	2	7782-49-2	SELENIUM	0.399	UJ	0.0998	0.399	mg/kg	U	UJ	FD	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6020A	4/21/2013	PH027	2.7	2	7440-22-4	SILVER	0.2	UJ	0.0200	0.200	mg/kg	U	UJ	FD	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6020A	4/21/2013	PH027	2.7	2	7440-24-6	STRONTIUM	14.9	J	0.0339	0.399	mg/kg		J	Q	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	6020A	4/21/2013	PH027	2.7	2	7440-28-0	THALLIUM	0.244		0.0299	0.200	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	7199	4/19/2013	PH027	2.7	1	18540-29-9	CHROMIUM (HEXAVALENT COMPOUNDS)	0.26	J	0.15	0.43	mg/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	7471B	4/18/2013	PH027	2.7	1	7439-97-6	MERCURY	0.02	U	0.0103	0.0200	mg/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8015M	4/16/2013	PH027	2.7	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8015M	4/16/2013	PH027	2.7	1	PHCC15C20	EFH (C15-C20)	4.3	J	2.0	5.1	mg/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8015M	4/16/2013	PH027	2.7	1	PHCC21C30	EFH (C21-C30)	7		2.0	5.1	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8015M	4/16/2013	PH027	2.7	1	PHCC30C40	EFH (C30-C40)	46	J	4.1	10	mg/kg		J	FD	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8015M	4/16/2013	PH027	2.7	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013	PH027	2.7	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	8082A	4/20/2013																	



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	57117-31-4	2,3,4,7,8-PECDF	0.485	J	0.0361	5.11	ng/kg	JB	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.365	J	0.0324	5.11	ng/kg	JBQ	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.512	J	0.0401	5.11	ng/kg	JB	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.35	J	0.0472	5.11	ng/kg	J	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.445	J	0.0472	5.11	ng/kg	JB	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	1.81	J	0.0302	5.11	ng/kg	JB	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.321	J	0.0517	5.11	ng/kg	JB	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.11	U	0.0703	5.11	ng/kg	JB	U	B	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	1613B	4/15/2013	PH028	2.2	1	TCDD TEQ	TCDD TEQ	0.743		0	0	ng/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/21/2013	PH028	2.2	1	7440-42-8	BORON	2.59	J	0.832	10.0	mg/kg	J	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/23/2013	PH028	2.2	1	7723-14-0	PHOSPHORUS	277		0.521	10.2	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7429-90-5	ALUMINUM (FUME OR DUST)	11400		7.73	40.1	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7439-89-6	IRON	16500		3.81	40.1	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7439-92-1	LEAD	5.62		0.471	3.01	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7439-93-2	LITHIUM	22.5		0.55	4.0	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7439-95-4	MAGNESIUM	3120		1.73	10.0	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7439-96-5	MANGANESE	237		0.0832	1.00	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7439-98-7	MOLYBDENUM	2	U	0.170	2.00	mg/kg	U			1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-02-0	NICKEL	5.93		0.110	2.00	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-09-7	POTASSIUM	3600	J	13.5	100	mg/kg		J	Q	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-23-5	SODIUM	66.5	J	16.7	100	mg/kg	J	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-31-5	TIN	10	U	0.221	10.0	mg/kg	J	U	B	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-32-6	TITANIUM METAL POWDER	958		0.170	1.00	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-36-0	ANTIMONY	4.01	UJ	0.501	4.01	mg/kg	U	UJ	Q	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-38-2	ARSENIC	3.78	J	0.331	4.01	mg/kg	J	J	Z	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-39-3	BARIUM	67.8		0.0331	1.00	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-41-7	BERYLLIUM	1	U	0.0672	1.00	mg/kg	J	U	B	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-43-9	CADMIUM	1	U	0.0331	1.00	mg/kg	J	U	B	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-47-3	CHROMIUM	9.79		0.0882	3.01	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-48-4	COBALT	3.19		0.0902	1.00	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-50-8	COPPER	3.54		0.180	2.00	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-62-2	VANADIUM (FUME OR DUST)	21.3		0.110	1.00	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-66-6	ZINC	56.4		0.200	4.01	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-67-7	ZIRCONIUM	5.01	U	0.832	5.01	mg/kg	U			1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6010C	4/19/2013	PH028	2.2	1	7440-70-2	CALCIUM METAL	1360	J	4.03	20.0	mg/kg		J	E	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6020A	4/21/2013	PH028	2.2	2	7782-49-2	SELENIUM	0.401	U	0.100	0.401	mg/kg	U			1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6020A	4/21/2013	PH028	2.2	2	7440-22-4	SILVER	0.2	U	0.0200	0.200	mg/kg	U			1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6020A	4/21/2013	PH028	2.2	2	7440-24-6	STRONTIUM	7.03	J	0.0341	0.401	mg/kg		J	Q	1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	6020A	4/21/2013	PH028	2.2	2	7440-28-0	THALLIUM	0.257		0.0301	0.200	mg/kg				1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	7471B	4/18/2013	PH028	2.2	1	7439-97-6	MERCURY	0.0203	U	0.0105	0.0203	mg/kg	U			1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	8015M	4/19/2013	PH028	2.2	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	8015M	4/19/2013	PH028	2.2	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1785377.142	267766.452	-118.71099	34.233712
SL-547-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7018431	LL	8015M	4/19/																	



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-36-0	ANTIMONY	2.12	J	0.501	4.01	mg/kg	J			Q, Z	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-38-2	ARSENIC	2.48	J	0.331	4.01	mg/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-39-3	BARIUM	91.2		0.0331	1.00	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-41-7	BERYLLIUM	0.65	J	0.0672	1.00	mg/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-42-8	BORON	3.07	J	0.832	10.0	mg/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-43-9	CADMIUM	0.469	J	0.0331	1.00	mg/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-47-3	CHROMIUM	20.2		0.0883	3.01	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-48-4	COBALT	6.07		0.0903	1.00	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-50-8	COPPER	8.86		0.181	2.01	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-62-2	VANADIUM (FUME OR DUST)	38.4		0.110	1.00	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-66-6	ZINC	59		0.201	4.01	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-67-7	ZIRCONIUM	1.39	J	0.832	5.01	mg/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7440-70-2	CALCIUM METAL	2670		4.03	20.1	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6010C	4/21/2013	PH032	3.2	1	7723-14-0	PHOSPHORUS	412	J	0.512	10.0	mg/kg		J	Q	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6020A	4/21/2013	PH032	3.2	2	7782-49-2	SELENIUM	0.401	U	0.100	0.401	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6020A	4/21/2013	PH032	3.2	2	7440-22-4	SILVER	0.0648	J	0.0201	0.201	mg/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6020A	4/21/2013	PH032	3.2	2	7440-24-6	STRONTIUM	18.9		0.0341	0.401	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	6020A	4/21/2013	PH032	3.2	2	7440-28-0	THALLIUM	0.263		0.0301	0.201	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	7471B	4/18/2013	PH032	3.2	1	7439-97-6	MERCURY	0.02		0.0100	0.0194	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8015M	4/23/2013	PH032	3.2	20	PHCC12C14	EFH (C12-C14)	100	U	41	100	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8015M	4/23/2013	PH032	3.2	20	PHCC15C20	EFH (C15-C20)	100	U	41	100	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8015M	4/23/2013	PH032	3.2	20	PHCC21C30	EFH (C21-C30)	140		41	100	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8015M	4/23/2013	PH032	3.2	20	PHCC30C40	EFH (C30-C40)	440		83	210	mg/kg				1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8015M	4/23/2013	PH032	3.2	20	PHCC8C11	EFH (C8-C11)	100	U	41	100	mg/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	11097-69-1	Aroclor 1254	13	J	4.5	17	ug/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	11126-42-4	Aroclor 5460	17	J	10	34	ug/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8082A	4/23/2013	PH032	3.2	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8270D SIM	4/25/2013	PH032	3.2	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	180	U	62	180	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8270D SIM	4/25/2013	PH032	3.2	10	117-84-0	Di-n-octylphthalate	180	U	62	180	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8270D SIM	4/25/2013	PH032	3.2	10	120-12-7	ANTHRACENE	17	U	3.4	17	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8270D SIM	4/25/2013	PH032	3.2	10	129-00-0	PYRENE	11	J	6.8	17	ug/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8270D SIM	4/25/2013	PH032	3.2	10	131-11-3	DIMETHYL PHTHALATE	180	U	62	180	ug/kg	U			1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8270D SIM	4/25/2013	PH032	3.2	10	191-24-2	BENZO(G,H,I)PERYLENE	9.5	J	6.8	17	ug/kg	J		Z	1784589.775	267471.389	-118.71358	34.232886	
SL-559-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024684	LL	8270D SIM	4/25/2013	PH032	3.2	10	192-97-2	Benzo(e)pyrene	170	U	34										



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	1613B	4/19/2013	PH032	5	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.18	U	0.0330	5.18	ng/kg	JB	U	B	1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	1613B	4/19/2013	PH032	5	1	TCDD TEQ	TCDD TEQ	1.05		0	0	ng/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7429-90-5	ALUMINUM (FUME OR DUST)	15600		7.96	41.3	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7439-89-6	IRON	21200		3.92	41.3	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7439-92-1	LEAD	10		0.485	3.10	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7439-93-2	LITHIUM	19.6		0.57	4.1	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7439-95-4	MAGNESIUM	3820		1.79	10.3	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7439-96-5	MANGANESE	328		0.0857	1.03	mg/kg				1784589.775	267471.389	-118.71358	34.232886
SL-559-SA7-SB-2.0-3.0	4/16/2013	N	2	3	ft	SO	7_DG		7024685	LL	6010C	4/21/2013	PH032	5	1	7439-98-7	MOLYBDENUM	2.06	U	0.175	2.06	mg/kg	J	U	F, B	1784589.775	267471.389	-118.71358	34.232886
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	120-12-7	ANTHRACENE	0.64	J	0.34	1.7	ug/kg	J		Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	129-00-0	PYRENE	7.8		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	191-24-2	BENZO(G,H,I)PERYLENE	3.6		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	192-97-2	Benzo(e)pyrene	7.4	J	3.4	17	ug/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	193-39-5	INDENO(1,2,3-CD)PYRENE	3.1		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	205-99-2	BENZO(B)FLUORANTHENE	12		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	206-44-0	FLUORANTHENE	9.3		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	207-08-9	BENZO(K)FLUORANTHENE	5.7		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	208-96-8	ACENAPHTHYLENE	1	J	0.34	1.7	ug/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	218-01-9	Chrysene	7.6		0.34	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	50-32-8	BENZO(A)PYRENE	6.4		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.3	J	0.67	1.7	ug/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	56-55-3	BENZO(A)ANTHRACENE	5.1		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.67	1.7	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	83-32-9	ACENAPHTHENE	1.7	U	0.67	1.7	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	85-01-8	PHENANTHRENE	2.1		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	86-73-7	FLUORENE	1.7	U	0.67	1.7	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	90-12-0	1-METHYLNAPHTHALENE	0.75	J	0.67	1.7	ug/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	91-20-3	NAPHTHALENE	6		0.67	1.7	ug/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8270D SIM	5/1/2013	PH039	1.1	1	91-57-6	2-METHYLNAPHTHALENE	1.4	J	0.67	1.7	ug/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	9045M	4/26/2013	PH039	1.1	1	pH	PH	7.98		0.0100	0.0100	pH unit				1785686.756	268207.979	-118.70997	34.234931
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	160.3M	5/1/2013	PH039	3.4	1	MOIST	MOISTURE	3.4		0.10	0.10	%				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	1613B	5/7/2013	PH039	3.4	1	1746-01-6	2,3,7,8-TCDD	0.0597	J	0.0279	1.02	ng/kg	JQ	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	1613B	5/7/2013	PH039	3.4	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	3.43	J	0.0560	5.08	ng/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	1613B	5/7/2013	PH039	3.4	1	3268-87-9	OCDD	1090		0.0771	10.2	ng/kg	B			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	1613B	5/7/2013	PH039	3.4	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	154		0.111	5.08	ng/kg	B			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	1613B	5/7/2013	PH039	3.4	1	39001-02-0	OCDF	87.8		0.0534	10.2	ng/kg	B			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	1613B	5/7/2013	PH039	3.4	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.8	J	0.0536	5.08	ng/kg	JB	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	1613B	5/7/2013	PH039	3.4	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.08	U	0.0779	5.08	ng/kg	U						



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8270D SIM	4/30/2013	PH036	3	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	11097-69-1	Aroclor 1254	25	J	4.5	17	ug/kg		J	FD, S	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	11126-42-4	Aroclor 5460	32	J	10	34	ug/kg	J	J	FD, S, Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8082A	4/27/2013	PH036	3	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8081B	4/27/2013	PH036	3	1	1024-57-3	HEPTACHLOR EPOXIDE	0.86	U	0.18	0.86	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	8081B	4/27/2013	PH036	3	1	1031-07-8	ENDOSULFAN SULFATE	1.8	U	0.34	1.8	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8082A	4/27/2013	PH036	2.1	5	11104-28-2	Aroclor 1221	87	U	26	87	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	191-24-2	BENZO(G,H,I)PERYLENE	3		0.70	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	192-97-2	Benzo(e)pyrene	4.2	J	3.5	18	ug/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.9		0.70	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	205-99-2	BENZO(B)FLUORANTHENE	9.3		0.70	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	206-44-0	FLUORANTHENE	7.6		0.70	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	207-08-9	BENZO(K)FLUORANTHENE	19		0.70	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	218-01-9	Chrysene	6.7		0.35	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	50-32-8	BENZO(A)PYRENE	3.5		0.70	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.2	J	0.70	1.7	ug/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	56-55-3	BENZO(A)ANTHRACENE	3.3		0.70	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.70	1.7	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	83-32-9	ACENAPHTHENE	1.7	U	0.70	1.7	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	84-66-2	DIETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	84-74-2	Di-n-butylphthalate	19	U	6.3	19	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	85-01-8	PHENANTHRENE	5.4		0.70	1.7	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	1613B	5/2/2013	PH037	7.1	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	0.358	J	0.0141	5.16	ng/kg	JB	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	1613B	5/2/2013	PH037	7.1	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.16	U	0.0156	5.16	ng/kg	JB	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	1613B	5/2/2013	PH037	7.1	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.16	U	0.0157	5.16	ng/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	1613B	5/2/2013	PH037	7.1	1	TCDD TEQ	TCDD TEQ	0.092		0	0	ng/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	6010C	5/3/2013	PH037	7.1	1	7429-90-5	ALUMINIUM (FUME OR DUST)	20000		7.98	41.4	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	6010C	5/3/2013	PH037	7.1	1	7439-89-6	IRON	23500		3.93	41.4	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	6010C	5/3/2013	PH037	7.1	1	7439-92-1	LEAD	6.34	J	0.486	3.11	mg/kg		J	E, Q	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	6010C	5/3/2013	PH037	7.1	1	7439-93-2	LITHIUM	24.5		0.57	4.1	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	6010C	5/3/2013	PH037	7.1	1	7439-95-4	MAGNESIUM</												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8082A	4/27/2013	PH037	7.1	1	12642-23-8	Aroclor 5442	35	U	11	35	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8082A	4/27/2013	PH037	7.1	1	12672-29-6	Aroclor 1248	18	U	3.5	18	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8082A	4/27/2013	PH037	7.1	1	12674-11-2	Aroclor 1016	18	U	3.5	18	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8082A	4/27/2013	PH037	7.1	1	37324-23-5	Aroclor 1262	18	U	3.5	18	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8082A	4/27/2013	PH037	7.1	1	53469-21-9	Aroclor 1242	18	U	3.5	18	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8082A	4/27/2013	PH037	7.1	1	63496-31-1	Aroclor 5432	35	U	11	35	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.5	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	117-84-0	Di-n-octylphthalate	19	U	6.5	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	120-12-7	ANTHRACENE	1.8	U	0.36	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	129-00-0	PYRENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.5	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	191-24-2	BENZO(G,H,I)PERYLENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	192-97-2	Benzo(e)pyrene	18	U	3.6	18	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	205-99-2	BENZO(B)FLUORANTHENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	206-44-0	FLUORANTHENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	207-08-9	BENZO(K)FLUORANTHENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	208-96-8	ACENAPHTHYLENE	1.8	U	0.36	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	218-01-9	Chrysene	1.8	U	0.36	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	50-32-8	BENZO(A)PYRENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	56-55-3	BENZO(A)ANTHRACENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	83-32-9	ACENAPHTHENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	84-66-2	DIETHYL PHTHALATE	19	U	6.5	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	84-74-2	Di-n-butylphthalate	19	U	6.5	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	85-01-8	PHENANTHRENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.5	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	86-73-7	FLUORENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	90-12-0	1-METHYLNAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	91-20-3	NAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	8270D SIM	5/3/2013	PH037	7.1	1	91-57-6	2-METHYLNAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-3.5-4.5	4/23/2013	N	3.5	4.5	ft	SO	7_DG		7032825	LL	9045M	4/24/2013	PH037	7.1	1	pH	PH	6.78		0.0100	0.0100	pH unit				1785553.714	268031.837	-118.71041	34.234445
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	160.3M	5/1/2013	PH038	4.9	1	MOIST	MOISTURE	4.9		0.10	0.10	%				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	1613B	5/2/2013	PH038	4.9	1	1746-01-6	2,3,7,8-TCDD	1.05	U	0.0208	1.05	ng/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	1613B	5/2/2013	PH038	4.9	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.248	J	0.0271	5.25	ng/kg	JB	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	1613B	5/2/2013	PH038	4.9	1	3268-87-9	OCDD	72.5		0.0234	10.5	ng/kg	B			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	1613B	5/2/2013	PH038	4.9	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	7.37		0.0204	5.25	ng/kg	B			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	1613B	5/2/2013	PH038	4.9	1	39001-02-0	OCDF	3.3	J	0.0180	10.5	ng/kg	JB	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	1613B	5/2/2013	PH038	4.9	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.138	J	0.0277	5.25	ng/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	1613B	5/2/2013	PH038	4.9	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.0676	J	0.0269	5.25	ng/kg	JO	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-6.5-7.5	4/24/2013	N	6.5	7.5	ft	SO	7_DG		7034499	LL	1613B	5/2/2013	PH038	4.9	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.098	J	0.0371	1.05	ng/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.1	18	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	120-12-7	ANTHRACENE	0.41	J	0.34	1.7	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	129-00-0	PYRENE	11		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	191-24-2	BENZO(G,H,I)PERYLENE	3		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	192-97-2	Benzo(e)pyrene	4.3	J	3.4	17	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	193-39-5	INDENO(1,2,3-CD)PYRENE	2.4		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	205-99-2	BENZO(B)FLUORANTHENE	9.9		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	206-44-0	FLUORANTHENE	10		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	207-08-9	BENZO(K)FLUORANTHENE	3.2		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	218-01-9	Chrysene	7		0.34	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	50-32-8	BENZO(A)PYRENE	4.4		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	56-55-3	BENZO(A)ANTHRACENE	2.3		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	84-74-2	Di-n-butylphthalate	7.6	J	6.1	18	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	85-01-8	PHENANTHRENE	5.8		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	86-73-9	FLUORENE	0.72	J	0.68	1.7	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	91-20-3	NAPHTHALENE	1.2	J	0.68	1.7	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8270D SIM	4/23/2013	PH029	1.6	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	9045M	4/12/2013	PH029	1.6	1	pH	pH	7.42		0.0100	0.0100	pH unit				1785071.049	267920.886	-118.712	34.23413
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	160.3M	4/16/2013	PH029	1.1	1	MOIST	MOISTURE	1.1		0.10	0.10	%				1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	1613B	4/17/2013	PH029	1.1	1	1746-01-6	2,3,7,8-TCDD	1	U	0.0297	1.00	ng/kg	JBQ	U	B	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	1613B	4/17/2013	PH029	1.1	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.368	J	0.0340	5.02	ng/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	1613B	4/17/2013	PH029	1.1	1	3268-87-9	OCDD	73.4		0.0216	10.0	ng/kg	B			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	1613B	4/17/2013	PH029	1.1	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	6.94		0.0282	5.02	ng/kg	B			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	1613B	4/17/2013	PH029	1.1	1	39001-02-0	OCDF	2.38	J	0.0237	10.0	ng/kg	JB	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	1613B	4/17/2013	PH029	1.1	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.02	U	0.0338	5.02	ng/kg	JB	U	B	1784846.755			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	6010C	4/19/2013	PH029	1.1	1	7723-14-0	PHOSPHORUS	459	J	0.511	10.0	mg/kg		Q		1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	6020A	4/21/2013	PH029	1.1	2	7782-49-2	SELENIUM	0.107	J	0.100	0.400	mg/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	6020A	4/21/2013	PH029	1.1	2	7440-22-4	SILVER	0.0459	J	0.0200	0.200	mg/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	6020A	4/21/2013	PH029	1.1	2	7440-24-6	STRONTIUM	19.2	J	0.0340	0.400	mg/kg		J	Q	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	6020A	4/21/2013	PH029	1.1	2	7440-28-0	THALLIUM	0.223		0.0300	0.200	mg/kg				1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	7471B	4/18/2013	PH029	1.1	1	7439-97-6	MERCURY	0.0192	U	0.0099	0.0192	mg/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8015M	4/19/2013	PH029	1.1	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8015M	4/19/2013	PH029	1.1	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8015M	4/19/2013	PH029	1.1	1	PHCC21C30	EFH (C21-C30)	11		2.0	5.1	mg/kg				1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8015M	4/19/2013	PH029	1.1	1	PHCC30C40	EFH (C30-C40)	16		4.0	10	mg/kg				1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8015M	4/19/2013	PH029	1.1	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8082A	4/20/2013	PH029	1.1	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	6.8	J	6.1	18	ug/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	129-00-0	PYRENE	1.2	J	0.67	1.7	ug/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	205-99-2	BENZO(B)FLUORANTHENE	1.2	J	0.67	1.7	ug/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	206-44-0	FLUORANTHENE	1.2	J	0.67	1.7	ug/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	218-01-9	Chrysene	1.1	J	0.34	1.7	ug/kg	J	J	Z	1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-553-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020345	LL	8270D SIM	4/23/2013	PH029	1.1	1	83-32-9	ACENAPHTHENE	1.7	U	0.67	1.7	ug/kg	U			1784846.755	267791.858	-118.71274	34.233771
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	1613B	4/18/2013	PH030	2.8	1	1746-01-6	2,3,7,8-TCDD	1.03	UJ	0.0244	1.03	ng/kg	JBO	UJ	B, FD	1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL																			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8270D SIM	4/25/2013	PH030	2.6	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8270D SIM	4/25/2013	PH030	2.6	1	85-01-8	PHENANTHRENE	1.2	J	0.68	1.7	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8270D SIM	4/25/2013	PH030	2.6	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8270D SIM	4/25/2013	PH030	2.6	1	86-73-7	FLUORENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8270D SIM	4/25/2013	PH030	2.6	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8270D SIM	4/25/2013	PH030	2.6	1	91-20-3	NAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8270D SIM	4/25/2013	PH030	2.6	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8082A	4/22/2013	PH030	2.6	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8015M	4/16/2013	PH030	2.6	24.8		GROCS6C12 GASOLINE RANGE ORGANICS (C5-C12)	1	U	0.2	1.0	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8015M	4/19/2013	PH030	2.6	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.1	5.1	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8015M	4/19/2013	PH030	2.6	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.1	5.1	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8015M	4/19/2013	PH030	2.6	1	PHCC21C30	EFH (C21-C30)	6.7	J	2.1	5.1	mg/kg		J	FD, Q	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8015M	4/19/2013	PH030	2.6	1	PHCC30C40	EFH (C30-C40)	14	J	4.1	10	mg/kg		J	FD, Q	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	8015M	4/19/2013	PH030	2.6	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.1	5.1	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	7471B	4/18/2013	PH030	2.6	1	7439-97-6	MERCURY	0.0202	U	0.0104	0.0202	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6020A	4/21/2013	PH030	2.6	2	7440-22-4	SILVER	0.0307	J	0.0197	0.197	mg/kg	J	J	FD, Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6020A	4/21/2013	PH030	2.6	2	7440-24-6	STRONTIUM	12		0.0336	0.395	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6020A	4/21/2013	PH030	2.6	2	7440-28-0	THALLIUM	0.232		0.0296	0.197	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6020A	4/21/2013	PH030	2.6	2	7782-49-2	SELENIUM	0.395	U	0.0987	0.395	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7429-90-5	ALUMINUM (FUME OR DUST)	10800		7.61	39.5	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7439-89-6	IRON	19000		3.75	39.5	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7439-92-1	LEAD	5.13		0.464	2.96	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7439-93-2	LITHIUM	23.5		0.54	3.9	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7439-95-4	MAGNESIUM	4080		1.71	9.87	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7439-96-5	MANGANESE	283		0.0819	0.987	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7439-98-7	MOLYBDENUM	1.97	UJ	0.168	1.97	mg/kg	J	UJ	F, FD	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7440-02-0	NICKEL	8.67		0.109	1.97	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7440-09-7	POTASSIUM	2760	J	13.3	98.7	mg/kg		J	Q	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7440-23-5	SODIUM	61.3	J	16.5	98.7	mg/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7440-31-5	TIN	9.87	U	0.217	9.87	mg/kg	J	U	B	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7440-32-6	TITANIUM METAL POWDER	1060		0.168	0.987	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	6010C	4/21/2013	PH030	2.6	1	7440-36-0	ANTIMONY	1.58	J	0.494	3.95	mg/kg	J	J	Q, Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-3.0-4.0	4/12/2013	N	3	4	ft	SO	7_DG		7022144	LL	601																		



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8270D SIM	4/25/2013	PH030	4.4	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-535-SA7-SB-9.0-10.0	4/12/2013	N	9	10	ft	SO	7_DG		7022151	LL	8270D SIM	4/25/2013	PH030	4.4	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.70	1.7	ug/kg	U			1785107.728	267962.282	-118.71188	34.234245
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6020A	4/29/2013	PH033	2.2	2	7440-28-0	THALLIUM	0.189	J	0.0298	0.199	mg/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	7471B	4/23/2013	PH033	2.2	1	7439-97-6	MERCURY	0.0178	J	0.0099	0.0192	mg/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8015M	4/23/2013	PH033	2.2	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8015M	4/23/2013	PH033	2.2	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8015M	4/23/2013	PH033	2.2	1	PHCC21C30	EFH (C21-C30)	16		2.0	5.1	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8015M	4/23/2013	PH033	2.2	1	PHCC30C40	EFH (C30-C40)	39		4.1	10	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8015M	4/23/2013	PH033	2.2	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	7.2	J	6.1	18	ug/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	129-00-0	PYRENE	2.2		0.68	1.7	ug/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	191-24-2	BENZO(G,H,I)PERYLENE	0.86	J	0.68	1.7	ug/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	193-39-5	INDENO(1,2,3-CD)PYRENE	0.84	J	0.68	1.7	ug/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	205-99-2	BENZO(B)FLUORANTHENE	2.8		0.68	1.7	ug/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	206-44-0	FLUORANTHENE	2.4		0.68	1.7	ug/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	207-08-9	BENZO(K)FLUORANTHENE	4		0.68	1.7	ug/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	218-01-9	Chrysene	2.1		0.34	1.7	ug/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	50-32-8	BENZO(A)PYRENE	1.2	J	0.68	1.7	ug/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	56-55-3	BENZO(A)ANTHRACENE	0.9	J	0.68	1.7	ug/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	85-01-8	PHENANTHRENE	1.1	J	0.68	1.7	ug/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8270D SIM	4/29/2013	PH033	2.2	1	86-73-7	FLUORENE	1.7	U	0.68	1.7	ug/kg	U			1785832.49	268459.519	-118	



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-39-3	BARIUM	100		0.0329	0.996	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-41-7	BERYLLIUM	0.551	J	0.0668	0.996	mg/kg	J	J	Z	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-42-8	BORON	9.96	U	0.827	9.96	mg/kg	J	U	B	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-43-9	CADMIUM	0.239	J	0.0329	0.996	mg/kg	J	J	Z	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-47-3	CHROMIUM	16.2		0.0877	2.99	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-48-4	COBALT	4.47		0.0897	0.996	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-50-8	COPPER	12.7		0.179	1.99	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-62-2	VANADIUM (FUME OR DUST)	30.9		0.110	0.996	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-66-6	ZINC	88.1		0.199	3.99	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-67-7	ZIRCONIUM	3.15	J	0.827	4.98	mg/kg	J	J	Z	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7440-70-2	CALCIUM METAL	2700		4.01	19.9	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6010C	4/28/2013	PH033	1.6	1	7723-14-0	PHOSPHORUS	390		0.508	9.96	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6020A	4/29/2013	PH033	1.6	2	7782-49-2	SELENIUM	0.399	U	0.0996	0.399	mg/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6020A	4/29/2013	PH033	1.6	2	7440-22-4	SILVER	0.0465	J	0.0199	0.199	mg/kg	J	J	Z	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6020A	4/29/2013	PH033	1.6	2	7440-24-6	STRONTIUM	20.7	J	0.0339	0.399	mg/kg		J	Q	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	6020A	4/29/2013	PH033	1.6	2	7440-28-0	THALLIUM	0.237		0.0299	0.199	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	7471B	4/23/2013	PH033	1.6	1	7439-97-6	MERCURY	0.0226		0.0100	0.0194	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8015M	4/23/2013	PH033	1.6	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8015M	4/23/2013	PH033	1.6	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8015M	4/23/2013	PH033	1.6	1	PHCC21C30	EFH (C21-C30)	7.5		2.0	5.1	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8015M	4/23/2013	PH033	1.6	1	PHCC30C40	EFH (C30-C40)	27		4.1	10	mg/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8015M	4/23/2013	PH033	1.6	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8082A	4/23/2013	PH033	1.6	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	18	U	6.1	18	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	120-12-7	ANTHRACENE	0.83	J	0.34	1.7	ug/kg	J	J	Z	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	129-00-0	PYRENE	12		0.68	1.7	ug/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	191-24-2	BENZO(G,H,I)PERYLENE	2.7		0.68	1.7	ug/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	192-97-2	Benzo(e)pyrene	4.8	J	3.4	17	ug/kg	J	J	Z	1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	193-39-5	INDENO(1,2,3-CD)PYRENE	2.7		0.68	1.7	ug/kg				1785751.574	268418.621	-118.70976	34.235511
SL-501-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026480	LL	8270D SIM	4/29/2013	PH033	1.6	1	205-99-2	BENZO(B)FLUORANTHENE	12											



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8015M	4/26/2013	PH034	1.8	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8015M	4/26/2013	PH034	1.8	1	PHCC21C30	EFH (C21-C30)	14	U	2.0	5.1	mg/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8015M	4/26/2013	PH034	1.8	1	PHCC30C40	EFH (C30-C40)	40	J	4.1	10	mg/kg		J	L	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8015M	4/26/2013	PH034	1.8	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8082A	4/27/2013	PH034	1.8	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	18	U	6.1	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	120-12-7	ANTHRACENE	0.4	J	0.34	1.7	ug/kg	J			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	129-00-0	PYRENE	0.8	J	0.68	1.7	ug/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	205-99-2	BENZO(B)FLUORANTHENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	206-44-0	FLUORANTHENE	0.96	J	0.68	1.7	ug/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	218-01-9	Chrysene	0.61	J	0.34	1.7	ug/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	85-01-8	PHENANTHRENE	1.5	J	0.68	1.7	ug/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	86-73-7	FLUORENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	91-20-3	NAPHTHALENE	0.92	J	0.68	1.7	ug/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	8270D SIM	4/30/2013	PH034	1.8	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028428	LL	9045M	4/19/2013	PH034	1.8	1	pH	PH												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6010C	4/28/2013	PH034	3.6	1	7440-48-4	COBALT	6.38		0.0898	0.997	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6010C	4/28/2013	PH034	3.6	1	7440-50-8	COPPER	16.4		0.180	1.99	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6010C	4/28/2013	PH034	3.6	1	7440-62-2	VANADIUM (FUME OR DUST)	49.1		0.110	0.997	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6010C	4/28/2013	PH034	3.6	1	7440-66-6	ZINC	60.9		0.199	3.99	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6010C	4/28/2013	PH034	3.6	1	7440-67-7	ZIRCONIUM	3.18	J	0.828	4.99	mg/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6010C	4/28/2013	PH034	3.6	1	7440-70-2	CALCIUM METAL	3660		4.01	19.9	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6010C	4/28/2013	PH034	3.6	1	7723-14-0	PHOSPHORUS	375		0.509	9.97	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6010C	4/29/2013	PH034	3.6	2	7439-89-6	IRON	23100		7.58	79.8	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6020A	4/29/2013	PH034	3.6	2	7782-49-2	SELENIUM	0.231	J	0.0997	0.399	mg/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6020A	4/29/2013	PH034	3.6	2	7440-22-4	SILVER	0.0368	J	0.0199	0.199	mg/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6020A	4/29/2013	PH034	3.6	2	7440-24-6	STRONTIUM	19.7		0.0339	0.399	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028429	LL	6020A	4/29/2013	PH034	3.6	2	7440-28-0	THALLIUM	0.271		0.0299	0.199	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-48-4	COBALT	3.74		0.0886	0.984	mg/kg				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-50-8	COPPER	5.32		0.177	1.97	mg/kg				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-62-2	VANADIUM (FUME OR DUST)	29.2		0.108	0.984	mg/kg				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-66-6	ZINC	56.3		0.197	3.94	mg/kg				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-67-7	ZIRCONIUM	4.92	U	0.817	4.92	mg/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-70-2	CALCIUM METAL	2460	J	3.96	19.7	mg/kg		J	E	1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7723-14-0	PHOSPHORUS	405	J	0.502	9.84	mg/kg		J	Q	1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6020A	4/21/2013	PH027	2.3	2	7782-49-2	SELENIUM	0.394	U	0.0984	0.394	mg/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6020A	4/21/2013	PH027	2.3	2	7440-22-4	SILVER	0.0205	J	0.0197	0.197	mg/kg	J	J	Z	1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6020A	4/21/2013	PH027	2.3	2	7440-24-6	STRONTIUM	10	J	0.0335	0.394	mg/kg		J	Q	1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6020A	4/21/2013	PH027	2.3	2	7440-28-0	THALLIUM	0.25		0.0295	0.197	mg/kg				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	7471B	4/18/2013	PH027	2.3	1	7439-97-6	MERCURY	0.0199	U	0.0103	0.0199	mg/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8015M	4/16/2013	PH027	2.3	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8015M	4/16/2013	PH027	2.3	1	PHCC15C20	EFH (C15-C20)	5.4		2.0	5.1	mg/kg				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8015M	4/16/2013	PH027	2.3	1	PHCC21C30	EFH (C21-C30)	11		2.0	5.1	mg/kg				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8015M	4/16/2013	PH027	2.3	1	PHCC30C40	EFH (C30-C40)	54		4.1	10	mg/kg				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8015M	4/16/2013	PH027	2.3	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8082A	4/20/2013	PH027	2.3	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8270D SIM	4/23/2013	PH027	2.3	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	18	U	6.1	18	ug/kg	U			1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	8270D SIM	4/23/2013	PH027	2.3	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785238.796			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-546-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016774	LL	1613B	4/13/2013	PH027	1.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	1.03	J	0.0745	4.97	ng/kg	JB	J	Z	1785308.694	267749.225	-118.71121	34.233663
SL-546-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016774	LL	1613B	4/13/2013	PH027	1.6	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.44	J	0.0981	4.97	ng/kg	B			1785308.694	267749.225	-118.71121	34.233663
SL-546-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016774	LL	1613B	4/13/2013	PH027	1.6	1	60851-34-5	2,3,4,6,7,8-HXCDF	1.27	J	0.0853	4.97	ng/kg	JB	J	Z	1785308.694	267749.225	-118.71121	34.233663
SL-546-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016774	LL	1613B	4/13/2013	PH027	1.6	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	19.2		0.0684	4.97	ng/kg	B			1785308.694	267749.225	-118.71121	34.233663
SL-546-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016774	LL	1613B	4/13/2013	PH027	1.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	1.62	J	0.0764	4.97	ng/kg	JB	J	Z	1785308.694	267749.225	-118.71121	34.233663
SL-546-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016774	LL	1613B	4/13/2013	PH027	1.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.605	J	0.101	4.97	ng/kg	J	J	Z	1785308.694	267749.225	-118.71121	34.233663
SL-546-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016774	LL	1613B	4/13/2013	PH027	1.6	1	TCDD TEQ	TCDD TEQ	4.56		0	0	ng/kg				1785308.694	267749.225	-118.71121	34.233663
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	160.3M	4/16/2013	PH027	2.7	1	MOIST	MOISTURE	2.7		0.10	0.10	%				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG		7016772	LL	1613B	4/13/2013	PH027	2.7	1	1746-01-6	2,3,7,8-TCDD	0.98	U	0.0293	0.980	ng/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.443	J	0.0344	4.90	ng/kg	JB	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	3268-87-9	OCDD	161	J	0.0297	9.80	ng/kg	B		FD	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	12.7		0.0354	4.90	ng/kg	B			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	39001-02-0	OCDF	4.4	J	0.0236	9.80	ng/kg	JB	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.197	J	0.0383	4.90	ng/kg	JB	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	4.9	U	0.0370	4.90	ng/kg	JB	U	B	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.98	U	0.0329	0.980	ng/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.239	J	0.0266	4.90	ng/kg	JB	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	57117-31-4	2,3,4,7,8-PECDF	4.9	U	0.0195	4.90	ng/kg	JB	U	B	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	4.9	U	0.0208	4.90	ng/kg	JBQ	U	B	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	57117-44-9	1,2,3,6,7,8-HXCDF	4.9	U	0.0248	4.90	ng/kg	JBQ	U	B	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.661	J	0.0386	4.90	ng/kg	JB	J	FD, Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.187	J	0.0251	4.90	ng/kg	JB	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	2.35	J	0.0210	4.90	ng/kg	JB	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.196	J	0.0263	4.90	ng/kg	JB	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.204	J	0.0271	4.90	ng/kg	J	J	FD, Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	1613B	4/13/2013	PH027	2.7	1	TCDD TEQ	TCDD TEQ	0.602	J	0	0	ng/kg		J	FD	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/22/2013	PH027	2.7	1	7440-42-8	BORON	9.98	U	0.828	9.98	mg/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7429-90-5	ALUMINUM (FUME OR DUST)	14800		7.69	39.9	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7439-89-6	IRON	19100		3.79	39.9	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7439-92-1	LEAD	4.92		0.469	2.99	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7439-93-2	LITHIUM	23.6		0.55	4.0	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7439-95-4	MAGNESIUM	4100		1.73	9.98	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7439-96-5	MANGANESE	245		0.0828	0.998	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7439-98-7	MOLYBDENUM	2	UJ	0.170	2.00	mg/kg	U	UJ	FD	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-02-0	NICKEL	8.86		0.110	2.00	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-09-7	POTASSIUM	3400	J	13.5	99.8	mg/kg		J	Q	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-23-5	SODIUM	69.5	J	16.7	99.8	mg/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-31-5	TIN	9.98	U	0.220	9.98	mg/kg	J	U	B	1785163.043	267731.637	-118.71169	34.233612
SL-840-SA7-SB-0.0-0.5	4/9/2013	FD	0	0.5	ft	SO	7_DG	SL-540-SA7-SB-0.0-0.5	7016772	LL	6010C	4/19/2013	PH027	2.7	1	7440-32-6	TITANIUM METAL POWDER	983		0.170	0.998	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	8270D SIM	4/23/2013	PH028	3	1														



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7439-89-6	IRON	14000		3.82	40.2	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7439-92-1	LEAD	19.5		0.473	3.02	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7439-93-2	LITHIUM	12		0.55	4.0	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7439-95-4	MAGNESIUM	2600		1.74	10.1	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7439-96-5	MANGANESE	198		0.0835	1.01	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7439-98-7	MOLYBDENUM	2.01	U	0.171	2.01	mg/kg	J	U	F, B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-02-0	NICKEL	7.15		0.111	2.01	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-09-7	POTASSIUM	2190	J	13.6	101	mg/kg		J	Q	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-23-5	SODIUM	77.4	J	16.8	101	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-31-5	TIN	10.1	U	0.221	10.1	mg/kg	J	U	B	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-32-6	TITANIUM METAL POWDER	713		0.171	1.01	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-36-0	ANTIMONY	1.18	J	0.503	4.02	mg/kg	J	J	Q, Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-38-2	ARSENIC	1.55	J	0.332	4.02	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-39-3	BARIUM	55.4		0.0332	1.01	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-41-7	BERYLLIUM	0.378	J	0.0674	1.01	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-42-8	BORON	3.37	J	0.835	10.1	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-43-9	CADMIUM	0.651	J	0.0332	1.01	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-47-3	CHROMIUM	14.3		0.0885	3.02	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-48-4	COBALT	3.82		0.0905	1.01	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-50-8	COPPER	6.4		0.181	2.01	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-62-2	VANADIUM (FUME OR DUST)	22.7		0.111	1.01	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-66-6	ZINC	48.7		0.201	4.02	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-67-7	ZIRCONIUM	1.32	J	0.835	5.03	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7440-70-2	CALCIUM METAL	2160		4.04	20.1	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6010C	4/21/2013	PH032	2.5	1	7723-14-0	PHOSPHORUS	308	J	0.513	10.1	mg/kg		J	Q	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6020A	4/21/2013	PH032	2.5	2	7782-49-2	SELENIUM	0.402	U	0.101	0.402	mg/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6020A	4/21/2013	PH032	2.5	2	7440-22-4	SILVER	0.0267	J	0.0201	0.201	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6020A	4/21/2013	PH032	2.5	2	7440-24-6	STRONTIUM	12.8		0.0342	0.402	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	6020A	4/21/2013	PH032	2.5	2	7440-28-0	THALLIUM	0.138	J	0.0302	0.201	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	7471B	4/18/2013	PH032	2.5	1	7439-97-6	MERCURY	0.0181	J	0.0102	0.0198	mg/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8015M	4/23/2013	PH032	2.5	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.1	5.1	mg/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8015M	4/23/2013	PH032	2.5	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.1	5.1	mg/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8015M	4/23/2013	PH032	2.5	1	PHCC21C30	EFH (C21-C30)	28		2.1	5.1	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8015M	4/23/2013	PH032	2.5	1	PHCC30C40	EFH (C30-C40)	36		4.1	10	mg/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8015M	4/23/2013	PH032	2.5	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.1	5.1	mg/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8082A	4/23/2013	PH032	2.5	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8082A	4/23/2013	PH032	2.5	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8082A	4/23/2013	PH032	2.5	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8082A	4/23/2013	PH032	2.5	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8082A	4/23/2013	PH032	2.5	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8082A	4/23/2013	PH032	2.5	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8082A	4/23/2013	PH032	2.5	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024690	LL	8082A	4/23/2013	PH032	2.5	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug							



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6010C	5/3/2013	PH039	3.6	1	7440-70-2	CALCIUM METAL	3810	J	4.05	20.1	mg/kg		J	E	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6010C	5/3/2013	PH039	3.6	1	7723-14-0	PHOSPHORUS	382	J	0.514	10.1	mg/kg		J	E	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6020A	5/6/2013	PH039	3.6	2	7782-49-2	SELENIUM	0.159	J	0.101	0.403	mg/kg	J	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6020A	5/6/2013	PH039	3.6	2	7440-22-4	SILVER	0.0213	J	0.0201	0.201	mg/kg	J	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6020A	5/6/2013	PH039	3.6	2	7440-24-6	STRONTIUM	22.4		0.0342	0.403	mg/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6020A	5/6/2013	PH039	3.6	2	7440-28-0	THALLIUM	0.286		0.0302	0.201	mg/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	7471B	5/3/2013	PH039	3.6	1	7439-97-6	MERCURY	0.03		0.0101	0.0168	mg/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8015M	5/2/2013	PH039	3.6	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8015M	5/2/2013	PH039	3.6	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8015M	5/2/2013	PH039	3.6	1	PHCC21C30	EFH (C21-C30)	9.1		2.1	5.2	mg/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8015M	5/2/2013	PH039	3.6	1	PHCC30C40	EFH (C30-C40)	23	J	4.1	10	mg/kg		J	L	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8015M	5/2/2013	PH039	3.6	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	11126-42-4	Aroclor 5460	34	UJ	10	34	ug/kg	U	UJ	E	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	12642-23-8	Aroclor 5442	34	UJ	10	34	ug/kg	U	UJ	E	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	63496-31-1	Aroclor 5432	34	UJ	10	34	ug/kg	U	UJ	E	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	9.9	J	6.2	19	ug/kg	J	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	120-12-7	ANTHRACENE	1.7	U	0.35	1.7	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	129-00-0	PYRENE	2.3		0.69	1.7	ug/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	191-24-2	BENZO(G,H,I)PERYLENE	0.94	J	0.69	1.7	ug/kg	J	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	193-39-5	INDENO(1,2,3-CD)PYRENE	0.84	J	0.69	1.7	ug/kg	J	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	205-99-2	BENZO(B)FLUORANTHENE	2.8		0.69	1.7	ug/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	206-44-0	FLUORANTHENE	3.3		0.69	1.7	ug/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	207-08-9	BENZO(K)FLUORANTHENE	8.5		0.69	1.7	ug/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	218-01-9	Chrysene	2.3		0.35	1.7	ug/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	50-32-8	BENZO(A)PYRENE	1.3	J	0.69	1.7	ug/kg	J	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	56-55-3	BENZO(A)ANTHRACENE	1.1	J	0.69	1.7	ug/kg	J	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8270D SIM	5/1/2013	PH039	3.6	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19								



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-32-6	TITANIUM METAL POWDER	1010		0.167	0.982	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-36-0	ANTIMONY	1.04	J	0.491	3.93	mg/kg	J	J	Q, Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-38-2	ARSENIC	5.76		0.324	3.93	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-39-3	BARIUM	61.4		0.0324	0.982	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-41-7	BERYLLIUM	0.429	J	0.0658	0.982	mg/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-42-8	BORON	9.82	U	0.815	9.82	mg/kg		U	F	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-43-9	CADMIUM	0.26	J	0.0324	0.982	mg/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-47-3	CHROMIUM	21.5		0.0864	2.95	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-48-4	COBALT	8.41	J	0.0884	0.982	mg/kg		J	E	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-50-8	COPPER	20.8		0.177	1.96	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-62-2	VANADIUM (FUME OR DUST)	34.9		0.108	0.982	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-66-6	ZINC	70.8		0.196	3.93	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-67-7	ZIRCONIUM	2.34	J	0.815	4.91	mg/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7440-70-2	CALCIUM METAL	2870	J	3.95	19.6	mg/kg		J	E	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6010C	5/3/2013	PH039	1.1	1	7723-14-0	PHOSPHORUS	448	J	0.501	9.82	mg/kg		J	E	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6020A	5/6/2013	PH039	1.1	2	7782-49-2	SELENIUM	0.109	J	0.0982	0.393	mg/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6020A	5/6/2013	PH039	1.1	2	7440-22-4	SILVER	0.0678	J	0.0196	0.196	mg/kg	J	J	Z	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6020A	5/6/2013	PH039	1.1	2	7440-24-6	STRONTIUM	17.2		0.0334	0.393	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	6020A	5/6/2013	PH039	1.1	2	7440-28-0	THALLIUM	0.294		0.0295	0.196	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	7471B	5/3/2013	PH039	1.1	1	7439-97-6	MERCURY	0.414		0.0098	0.0163	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8015M	5/2/2013	PH039	1.1	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	160.3M	4/23/2013	PH035	4.4	1	MOIST	MOISTURE	4.4		0.10	0.10	%				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	1746-01-6	2,3,7,8-TCDD	0.279	J	0.0479	1.04	ng/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	9.77		0.0416	5.18	ng/kg	B			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	3268-87-9	OCDD	5740	J	0.0722	10.4	ng/kg	BE	J	*#	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	1613B	4/26/2013	PH035	4.4	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	508		0.0999	5.18	ng/kg	B			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	959-98-8	ENDOSULFAN I	0.87	U	0.23	0.87	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	11096-82-5	Aroclor 1260	7.8	J	4.1	18	ug/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	11097-69-1	Aroclor 1254	13	J	4.6	18	ug/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	11126-42-4	Aroclor 5460	34		10	34	ug/kg	J			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	53469-21-9	Aroclor 1242	18	U	3.4	18	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8082A	4/27/2013	PH035	4.4	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	117-81-7	BIS(2-(ETHYLHEXYL)PHTHALATE	31		6.3	19	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	117-84-0	Di-n-octylphthalate	19	U	6.3	19	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4	1	120-12-7	ANTHRACENE	0.73	J	0.35	1.7	ug/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8270D SIM	4/30/2013	PH035	4.4															



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-42-8	BORON	10.8	U	0.899	10.8	mg/kg		U	F	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-43-9	CADMIUM	0.233	J	0.0357	1.08	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-47-3	CHROMIUM	20.3		0.0953	3.25	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-48-4	COBALT	4.64	J	0.0975	1.08	mg/kg		J	E	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-50-8	COPPER	11.1		0.195	2.17	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-62-2	VANADIUM (FUME OR DUST)	38.1		0.119	1.08	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-66-6	ZINC	50.5		0.217	4.33	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-67-7	ZIRCONIUM	2.78	J	0.899	5.42	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7440-70-2	CALCIUM METAL	3050	J	4.35	21.7	mg/kg		J	E	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6010C	5/3/2013	PH037	9.5	1	7723-14-0	PHOSPHORUS	300	J	0.552	10.8	mg/kg		J	E, A	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6020A	5/6/2013	PH037	9.5	2	7782-49-2	SELENIUM	0.159	J	0.108	0.433	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6020A	5/6/2013	PH037	9.5	2	7440-22-4	SILVER	0.047	J	0.0217	0.217	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6020A	5/6/2013	PH037	9.5	2	7440-24-6	STRONTIUM	21.8		0.0368	0.433	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	6020A	5/6/2013	PH037	9.5	2	7440-28-0	THALLIUM	0.297		0.0325	0.217	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	7471B	4/26/2013	PH037	9.5	1	7439-97-6	MERCURY	0.0165	J	0.0110	0.0178	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8015M	4/26/2013	PH037	9.5	1	PHCC12C14	EFH (C12-C14)	5.5	U	2.2	5.5	mg/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8015M	4/26/2013	PH037	9.5	1	PHCC15C20	EFH (C15-C20)	5.5	U	2.2	5.5	mg/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8015M	4/26/2013	PH037	9.5	1	PHCC21C30	EFH (C21-C30)	15		2.2	5.5	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8015M	4/26/2013	PH037	9.5	1	PHCC30C40	EFH (C30-C40)	27	J	4.4	11	mg/kg		J	L	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8015M	4/26/2013	PH037	9.5	1	PHCC8C11	EFH (C8-C11)	5.5	U	2.2	5.5	mg/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	11096-82-5	Aroclor 1260	19	U	4.3	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	11097-69-1	Aroclor 1254	19	U	4.8	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	11100-14-4	Aroclor 1268	19	U	3.6	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	11104-28-2	Aroclor 1221	19	U	5.6	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	11126-42-4	Aroclor 5460	36	U	11	36	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	11141-16-5	Aroclor 1232	19	U	4.5	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	12642-23-8	Aroclor 5442	36	U	11	36	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	12672-29-6	Aroclor 1248	19	U	3.6	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	12674-11-2	Aroclor 1016	19	U	3.6	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	37324-23-5	Aroclor 1262	19	U	3.6	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	53469-21-9	Aroclor 1242	19	U	3.6	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8082A	4/27/2013	PH037	9.5	1	63496-31-1	Aroclor 5432	36	U	11	36	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	36		6.6	20	ug/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	117-84-0	Di-n-octylphthalate	20	U	6.6	20	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	120-12-7	ANTHRACENE	1.8	U	0.37	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	129-00-0	PYRENE	2		0.74	1.8	ug/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	131-11-3	DIMETHYL PHTHALATE	20	U	6.6	20	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	191-24-2	BENZO(G,H,I)PERYLENE	0.94	J	0.74	1.8	ug/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	192-97-2	Benzo(e)pyrene	19	U	3.7	19	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1	J	0.74	1.8	ug/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	205-99-2	BENZO(B)FLUORANTHENE	1.9		0.74	1.8	ug/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	206-44-0	FLUORANTHENE	2.3		0.74	1.8	ug/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032824	LL	8270D SIM	5/3/2013	PH037	9.5	1	207-08-9	BENZO(K)FLUORANTHENE	0.75	J	0.74	1.8								



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7439-93-2	LITHIUM	20.1		0.56	4.1	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7439-95-4	MAGNESIUM	5430		1.76	10.2	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-02-0	NICKEL	9.25	J	0.112	2.04	mg/kg		J	A	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-36-0	ANTIMONY	0.598	J	0.509	4.07	mg/kg	J	J	Q, Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-38-2	ARSENIC	4.64		0.336	4.07	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-39-3	BARIUM	59		0.0336	1.02	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-41-7	BERYLLIUM	0.536	J	0.0682	1.02	mg/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-42-8	BORON	10.2	U	0.845	10.2	mg/kg	J	U	F	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-43-9	CADMIUM	0.151	J	0.0336	1.02	mg/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-48-4	COBALT	4.26	J	0.0916	1.02	mg/kg		J	E	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-50-8	COPPER	8.58		0.183	2.04	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-62-2	VANADIUM (FUME OR DUST)	33.3		0.112	1.02	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-66-6	ZINC	55.5		0.204	4.07	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7440-70-2	CALCIUM METAL	2830	J	4.09	20.4	mg/kg		J	E	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6010C	5/5/2013	PH038	4.6	1	7723-14-0	PHOSPHORUS	338	J	0.519	10.2	mg/kg		J	E, A	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6020A	5/6/2013	PH038	4.6	2	7440-22-4	SILVER	0.0393	J	0.0204	0.204	mg/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6020A	5/6/2013	PH038	4.6	2	7440-24-6	STRONTIUM	17.9		0.0346	0.407	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6020A	5/6/2013	PH038	4.6	2	7440-28-0	THALLIUM	0.398		0.0305	0.204	mg/kg				1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	6020A	5/6/2013	PH038	4.6	2	7782-49-2	SELENIUM	0.358	J	0.102	0.407	mg/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	7471B	5/3/2013	PH038	4.6	1	7439-97-6	MERCURY	0.0141	J	0.010	0.0167	mg/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8015M	5/2/2013	PH038	4.6	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8015M	5/2/2013	PH038	4.6	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8015M	5/2/2013	PH038	4.6	1	PHCC21C30	EFH (C21-C30)	5	J	2.1	5.2	mg/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8015M	5/2/2013	PH038	4.6	1	PHCC30C40	EFH (C30-C40)	11	J	4.2	10	mg/kg		J	L	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8015M	5/2/2013	PH038	4.6	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	11096-82-5	Aroclor 1260	18	U	4.1	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	11097-69-1	Aroclor 1254	18	U	4.6	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	11100-14-4	Aroclor 1268	18	U	3.5	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	11126-42-4	Aroclor 5460	35	U	10	35	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	12642-23-8	Aroclor 5442	35	U	10	35	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	12672-29-6	Aroclor 1248	18	U	3.5	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	12674-11-2	Aroclor 1016	18	U	3.5	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	37324-23-5	Aroclor 1262	18	U	3.5	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	53469-21-9	Aroclor 1242	18	U	3.5	18	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8082A	4/27/2013	PH038	4.6	1	63496-31-1	Aroclor 5432	35	U	10	35	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8270D SIM	5/1/2013	PH038	4.6	1	117-81-7	BI(2-ETHYLHEXYL)PHTHALATE	6.7	J	6.3	19	ug/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8270D SIM	5/1/2013	PH038	4.6	1	117-84-0	Di-n-octylphthalate	19	U	6.3	19	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8270D SIM	5/1/2013	PH038	4.6	1	120-12-7	ANTHRACENE	1.7	U	0.35	1.7	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8270D SIM	5/1/2013	PH038	4.6	1	129-00-0	PYRENE	0.96	J	0.70	1.7	ug/kg	J	J	Z	1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8270D SIM	5/1/2013	PH038	4.6	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785402.91	268055.868	-118.71091	34.234508
SL-529-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7034500	LL	8270D SIM	5/1/2013	PH038	4.6	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.70	1.7	ug/kg	U			1785402.91	268055.868</		



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	1613B	4/17/2013	PH029	1.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.465	J	0.0290	4.97	ng/kg	JB	J		Z	1785071.049	267920.886	-118.712	34.23413
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	1613B	4/17/2013	PH029	1.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	4.97	U	0.0309	4.97	ng/kg	JB	U	B	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	1613B	4/17/2013	PH029	1.6	1	TCDD TEQ	TCDD TEQ	2.94		0	0	ng/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/21/2013	PH029	1.6	1	7440-42-8	BORON	2.81	J	0.843	10.2	mg/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7429-90-5	ALUMINUM (FUME OR DUST)	9260		7.84	40.7	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7439-89-6	IRON	15500		3.86	40.7	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7439-92-1	LEAD	4.32		0.478	3.05	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7439-93-2	LITHIUM	22		0.56	4.1	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7439-95-4	MAGNESIUM	3870		1.76	10.2	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7439-96-5	MANGANESE	228		0.0843	1.02	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7439-98-7	MOLYBDENUM	2.03	U	0.173	2.03	mg/kg	U			1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-02-0	NICKEL	7.27		0.112	2.03	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-09-7	POTASSIUM	3030	J	13.7	102	mg/kg		J	Q	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-23-5	SODIUM	55.1	J	17.0	102	mg/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-31-5	TIN	10.2	U	0.224	10.2	mg/kg	J	U	B	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-32-6	TITANIUM METAL POWDER	875		0.173	1.02	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-36-0	ANTIMONY	4.07	UJ	0.508	4.07	mg/kg	U	UJ	Q	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-38-2	ARSENIC	3.54	J	0.335	4.07	mg/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-39-3	BARIUM	61.4		0.0335	1.02	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-41-7	BERYLLIUM	0.411	J	0.0681	1.02	mg/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-43-9	CADMIUM	0.162	J	0.0335	1.02	mg/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-47-3	CHROMIUM	12.7		0.0894	3.05	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-48-4	COBALT	3.5		0.0915	1.02	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-50-8	COPPER	5.16		0.183	2.03	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-62-2	VANADIUM (FUME OR DUST)	24.9		0.112	1.02	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-66-6	ZINC	63		0.203	4.07	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-67-7	ZIRCONIUM	5.08	U	0.843	5.08	mg/kg	U			1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7440-70-2	CALCIUM METAL	2690	J	4.09	20.3	mg/kg		J	E	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6010C	4/19/2013	PH029	1.6	1	7723-14-0	PHOSPHORUS	372	J	0.518	10.2	mg/kg		J	Q	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6020A	4/21/2013	PH029	1.6	2	7782-49-2	SELENIUM	0.407	U	0.102	0.407	mg/kg	U			1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6020A	4/21/2013	PH029	1.6	2	7440-22-4	SILVER	0.203	U	0.0203	0.203	mg/kg	U			1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6020A	4/21/2013	PH029	1.6	2	7440-24-6	STRONTIUM	11	J	0.0346	0.407	mg/kg		J	Q	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	6020A	4/21/2013	PH029	1.6	2	7440-28-0	THALLIUM	0.204		0.0305	0.203	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	7471B	4/18/2013	PH029	1.6	1	7439-97-6	MERCURY	0.0113	J	0.0099	0.0192	mg/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8015M	4/19/2013	PH029	1.6	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8015M	4/19/2013	PH029	1.6	1	PHCC15C20	EFH (C15-C20)	2.2	J	2.0	5.1	mg/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8015M	4/19/2013	PH029	1.6	1	PHCC21C30	EFH (C21-C30)	18		2.0	5.1	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8015M	4/19/2013	PH029	1.6	1	PHCC30C40	EFH (C30-C40)	55		4.1	10	mg/kg				1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8015M	4/19/2013	PH029	1.6	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785071.049	267920.886	-118.712	34.23413	
SL-536-SA7-SB-0.0-0.5	4/11/2013	N	0	0.5	ft	SO	7_DG		7020348	LL	8082A	4/20/2013	PH029	1.6	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413	
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361	
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361	
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361	
SL-																														



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.3	J	0.68	1.7	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	205-99-2	BENZO(B)FLUORANTHENE	3.5		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	206-44-0	FLUORANTHENE	3.5		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	207-08-9	BENZO(K)FLUORANTHENE	1	J	0.68	1.7	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	218-01-9	Chrysene	2.6		0.34	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	50-32-8	BENZO(A)PYRENE	1.5	J	0.68	1.7	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	56-55-3	BENZO(A)ANTHRACENE	0.91	J	0.68	1.7	ug/kg	J	J	Z	1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	85-01-8	PHENANTHRENE	2		0.68	1.7	ug/kg				1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	86-73-7	FLUORENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	91-20-3	NAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8270D SIM	4/25/2013	PH030	2.8	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8082A	4/22/2013	PH030	2.8	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8015M	4/16/2013	PH030	2.8	25.35	GROCS5C12	GASOLINE RANGE ORGANICS (C5-C12)	1	U	0.2	1.0	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8015M	4/19/2013	PH030	2.8	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.1	5.1	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8015M	4/19/2013	PH030	2.8	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.1	5.1	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8015M	4/19/2013	PH030	2.8	1	PHCC21C30	EFH (C21-C30)	5.1	UJ	2.1	5.1	mg/kg	U	UJ	FD	1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8015M	4/19/2013	PH030	2.8	1	PHCC30C40	EFH (C30-C40)	10	UJ	4.1	10	mg/kg	U	UJ	FD	1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	8015M	4/19/2013	PH030	2.8	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.1	5.1	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	7471B	4/18/2013	PH030	2.8	1	7439-97-6	MERCURY	0.02	U	0.0103	0.0200	mg/kg	U			1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	6020A	4/21/2013	PH030	2.8	2	7440-22-4	SILVER	0.198	UJ	0.0198	0.198	mg/kg	U	UJ	FD	1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	6020A	4/21/2013	PH030	2.8	2	7440-24-6	STRONTIUM	10.9		0.0336	0.396	mg/kg				1785071.049	267920.886	-118.712	34.23413
SL-836-SA7-SB-3.0-4.0	4/12/2013	FD	3	4	ft	SO	7_DG	SL-536-SA7-SB-3.0-4.0	7022148	LL	6020A	4/21/2013	PH030																



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-23-5	SODIUM	60.1	J	16.8	101	mg/kg	J	J		1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-31-5	TIN	10.1	U	0.221	10.1	mg/kg	J	U	B	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-32-6	TITANIUM METAL POWDER	1060		0.171	1.01	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-36-0	ANTIMONY	1.49	J	0.503	4.02	mg/kg	J	J	Q, Z	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-38-2	ARSENIC	1.83	J	0.332	4.02	mg/kg	J	J	Z	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-39-3	BARIUM	81.1		0.0332	1.01	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-41-7	BERYLLIUM	0.492	J	0.0673	1.01	mg/kg	J	J	Z	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-42-8	BORON	3.01	J	0.834	10.1	mg/kg	J	J	Z	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-43-9	CADMIUM	0.445	J	0.0332	1.01	mg/kg	J	J	Z	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-47-3	CHROMIUM	17		0.0885	3.02	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-48-4	COBALT	4.87		0.0905	1.01	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-50-8	COPPER	5.72		0.181	2.01	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-62-2	VANADIUM (FUME OR DUST)	28.9		0.111	1.01	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-66-6	ZINC	76.1		0.201	4.02	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-67-7	ZIRCONIUM	5.03	U	0.834	5.03	mg/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7440-70-2	CALCIUM METAL	2470		4.04	20.1	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6010C	4/21/2013	PH031	1.5	1	7723-14-0	PHOSPHORUS	409	J	0.513	10.1	mg/kg		J	Q	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6020A	4/21/2013	PH031	1.5	2	7782-49-2	SELENIUM	0.402	U	0.101	0.402	mg/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6020A	4/21/2013	PH031	1.5	2	7440-22-4	SILVER	0.0394	J	0.0201	0.201	mg/kg	J	J	Z	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6020A	4/21/2013	PH031	1.5	2	7440-24-6	STRONTIUM	13.6		0.0342	0.402	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	6020A	4/21/2013	PH031	1.5	2	7440-28-0	THALLIUM	0.267		0.0302	0.201	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	7471B	4/18/2013	PH031	1.5	1	7439-97-6	MERCURY	0.0152	J	0.0101	0.0195	mg/kg	J	J	Z	1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8015M	4/23/2013	PH031	1.5	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8015M	4/23/2013	PH031	1.5	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8015M	4/23/2013	PH031	1.5	1	PHCC21C30	EFH (C21-C30)	18		2.0	5.1	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8015M	4/23/2013	PH031	1.5	1	PHCC30C40	EFH (C30-C40)	34		4.1	10	mg/kg				1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8015M	4/23/2013	PH031	1.5	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8082A	4/23/2013	PH031	1.5	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	8082A	4/23/2013	PH033	2.2	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8270D SIM	4/25/2013	PH031	1.5	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	18	U	6.0	18	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8270D SIM	4/25/2013	PH031	1.5	1	117-84-0	Di-n-octylphthalate	18	U	6.0	18	ug/kg	U			1785121.77	267883.835	-118.71183	34.234029
SL-538-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023138	LL	8270D SIM	4/25/2013	PH031	1.5	1	120-12-7	ANTHRACENE	0.5	J	0.33	1.7	ug/kg	J	J	Z				



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	1613B	4/22/2013	PH033	2.2	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.688	J	0.0450	5.00	ng/kg	JB	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	1613B	4/22/2013	PH033	2.2	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.392	J	0.0315	5.00	ng/kg	JBQ	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	1613B	4/22/2013	PH033	2.2	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	2.82	J	0.0246	5.00	ng/kg	JB	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	1613B	4/22/2013	PH033	2.2	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.949	J	0.0352	5.00	ng/kg	JB	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	1613B	4/22/2013	PH033	2.2	1	72918-21-9	1,2,3,7,8,9-HXCDF	5	U	0.0339	5.00	ng/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	1613B	4/22/2013	PH033	2.2	1	TCDD TEQ	TCDD TEQ	0.551		0	0	ng/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7429-90-5	ALUMINUM (FUME OR DUST)	12000		7.65	39.7	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7439-89-6	IRON	17000		3.77	39.7	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7439-92-1	LEAD	11	J	0.467	2.98	mg/kg		J	E, Q	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7439-93-2	LITHIUM	21.9		0.55	4.0	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7439-95-4	MAGNESIUM	3440		1.72	9.93	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7439-96-5	MANGANESE	260		0.0824	0.993	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7439-98-7	MOLYBDENUM	1.99	U	0.169	1.99	mg/kg	J	U	F	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-02-0	NICKEL	8.27		0.109	1.99	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-09-7	POTASSIUM	2330	J	13.4	99.3	mg/kg		J	Q	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-23-5	SODIUM	118		16.6	99.3	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-31-5	TIN	9.93	U	0.218	9.93	mg/kg	J	U	B	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-32-6	TITANIUM METAL POWDER	876		0.169	0.993	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-36-0	ANTIMONY	3.97	UJ	0.496	3.97	mg/kg	U	UJ	Q	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-38-2	ARSENIC	9.73		0.328	3.97	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-39-3	BARIUM	74.2		0.0328	0.993	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-41-7	BERYLLIUM	0.466	J	0.0665	0.993	mg/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-42-8	BORON	9.93	U	0.824	9.93	mg/kg	J	U	B	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-43-9	CADMIUM	0.165	J	0.0328	0.993	mg/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-47-3	CHROMIUM	13.5		0.0874	2.98	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-48-4	COBALT	3.87		0.0893	0.993	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-50-8	COPPER	9.56		0.179	1.99	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-62-2	VANADIUM (FUME OR DUST)	27.3		0.109	0.993	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-66-6	ZINC	87.9		0.199	3.97	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-67-7	ZIRCONIUM	2.35	J	0.824	4.96	mg/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7440-70-2	CALCIUM METAL	2430		3.99	19.9	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6010C	4/28/2013	PH033	2.2	1	7723-14-0	PHOSPHORUS	298		0.506	9.93	mg/kg				1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6020A	4/29/2013	PH033	2.2	2	7782-49-2	SELENIUM	0.397	U	0.0993	0.397	mg/kg	U			1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6020A	4/29/2013	PH033	2.2	2	7440-22-4	SILVER	0.0356	J	0.0199	0.199	mg/kg	J	J	Z	1785832.49	268459.519	-118.7095	34.235625
SL-500-SA7-SB-0.0-0.5	4/17/2013	N	0	0.5	ft	SO	7_DG		7026481	LL	6020A	4/29/2013	PH033	2.2	2	7440-24-6	STRONTIUM	17.2	J	0.0338	0.397	mg/kg		J	Q	1785832.49	268459.519	-118.7095	34.235625
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	9045M	4/19/2013	PH034	2.9	1	pH	PH	7.38		0.0100	0.0100	pH unit				1785400.814	267987.298	-118.71091	34.234319
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	160.3M	4/25/2013	PH034	2.2	1	MOIST	MOISTURE	2.2		0.10	0.10	%				1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	1613B	4/25/2013	PH034	2.2	1	1746-01-6	2,3,7,8-TCDD	1	U	0.0217	1.00	ng/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	1613B	4/25/2013	PH034	2.2	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.482	J	0.0284	5.01	ng/kg	JBQ	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	1613B	4/25/2013	PH034	2.2	1	3268-87-9	OCDD	78.8		0.0198	10.0	ng/kg	B			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	1613B	4/25/2013	PH034	2.2	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	7.64		0.0237	5.01	ng/kg	B			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	1613B	4/25/2013	PH034	2.2	1	39001-02-0	OCDF	1.92	J	0.0201	10.0	ng/kg	JB	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	1613B	4/25/2013	PH034	2.2	1	39227-													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	6010C	4/28/2013	PH034	2.2	1	7440-70-2	CALCIUM METAL	2780		3.99	19.9	mg/kg				1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	6010C	4/28/2013	PH034	2.2	1	7723-14-0	PHOSPHORUS	445		0.506	9.93	mg/kg				1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	6020A	4/29/2013	PH034	2.2	2	7782-49-2	SELENIUM	0.397	U	0.0993	0.397	mg/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	6020A	4/29/2013	PH034	2.2	2	7440-22-4	SILVER	0.199	U	0.0199	0.199	mg/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	6020A	4/29/2013	PH034	2.2	2	7440-24-6	STRONTIUM	9.97		0.0338	0.397	mg/kg				1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	6020A	4/29/2013	PH034	2.2	2	7440-28-0	THALLIUM	0.198	J	0.0298	0.199	mg/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	7471B	4/23/2013	PH034	2.2	1	7439-97-6	MERCURY	0.0171	J	0.0106	0.0204	mg/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8015M	4/26/2013	PH034	2.2	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8015M	4/26/2013	PH034	2.2	1	PHCC15C20	EFH (C15-C20)	4.9	J	2.0	5.1	mg/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8015M	4/26/2013	PH034	2.2	1	PHCC21C30	EFH (C21-C30)	25		2.0	5.1	mg/kg				1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8015M	4/26/2013	PH034	2.2	1	PHCC30C40	EFH (C30-C40)	84	J	4.1	10	mg/kg		J	L	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8015M	4/26/2013	PH034	2.2	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8082A	4/27/2013	PH034	2.2	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	18	U	6.1	18	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	129-00-0	PYRENE	1.4	J	0.68	1.7	ug/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	191-24-2	BENZO(G,H,I)PERYLENE	0.86	J	0.68	1.7	ug/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	193-39-5	INDENO(1,2,3-CD)PYRENE	0.86	J	0.68	1.7	ug/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	205-99-2	BENZO(B)FLUORANTHENE	1.4	J	0.68	1.7	ug/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	206-44-0	FLUORANTHENE	1.5	J	0.68	1.7	ug/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	207-08-9	BENZO(K)FLUORANTHENE	4.4		0.68	1.7	ug/kg				1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	218-01-9	Chrysene	1.4	J	0.34	1.7	ug/kg	J	J	Z	1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.68	1.7	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1	84-66-2	DIETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785334.199	267996.665	-118.71113	34.234344
SL-531-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028427	LL	8270D SIM	4/30/2013	PH034	2.2	1														



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/22/2013	PH027	2	1	7440-42-8	BORON	10.2	U	0.847	10.2	mg/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7429-90-5	ALUMINUM (FUME OR DUST)	13400		7.87	40.8	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7439-89-6	IRON	17600		3.88	40.8	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7439-92-1	LEAD	4.91		0.480	3.06	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7439-93-2	LITHIUM	21.7		0.56	4.1	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7439-95-4	MAGNESIUM	3950		1.77	10.2	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7439-96-5	MANGANESE	241		0.0847	1.02	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7439-98-7	MOLYBDENUM	2.04	U	0.173	2.04	mg/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-02-0	NICKEL	8.56		0.112	2.04	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-09-7	POTASSIUM	2560	J	13.8	102	mg/kg		J	Q	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-23-5	SODIUM	71.7	J	17.0	102	mg/kg	J	J	Z	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-31-5	TIN	10.2	U	0.224	10.2	mg/kg	J	U	B	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-32-6	TITANIUM METAL POWDER	932		0.173	1.02	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-36-0	ANTIMONY	4.08	UJ	0.510	4.08	mg/kg	U	UJ	Q	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-38-2	ARSENIC	4.48		0.337	4.08	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-39-3	BARIUM	70.3		0.0337	1.02	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-41-7	BERYLLIUM	0.527	J	0.0684	1.02	mg/kg	J	J	Z	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-43-9	CADMIUM	0.118	J	0.0337	1.02	mg/kg	J	J	Z	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-47-3	CHROMIUM	15		0.0898	3.06	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-48-4	COBALT	4.04		0.0918	1.02	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-50-8	COPPER	6.05		0.184	2.04	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-62-2	VANADIUM (FUME OR DUST)	30.4		0.112	1.02	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-66-6	ZINC	48.8		0.204	4.08	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-67-7	ZIRCONIUM	5.1	U	0.847	5.10	mg/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7440-70-2	CALCIUM METAL	3600	J	4.10	20.4	mg/kg		J	E	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6010C	4/19/2013	PH027	2	1	7723-14-0	PHOSPHORUS	369	J	0.520	10.2	mg/kg		J	Q	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6020A	4/21/2013	PH027	2	2	7782-49-2	SELENIUM	0.187	J	0.102	0.408	mg/kg	J	J	Z	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6020A	4/21/2013	PH027	2	2	7440-22-4	SILVER	0.204	U	0.0204	0.204	mg/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6020A	4/21/2013	PH027	2	2	7440-24-6	STRONTIUM	18.2	J	0.0347	0.408	mg/kg		J	Q	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	6020A	4/21/2013	PH027	2	2	7440-28-0	THALLIUM	0.241		0.0306	0.204	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	7471B	4/18/2013	PH027	2	1	7439-97-6	MERCURY	0.0203	U	0.0105	0.0203	mg/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8015M	4/16/2013	PH027	2	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8015M	4/16/2013	PH027	2	1	PHCC15C20	EFH (C15-C20)	3.5	J	2.0	5.1	mg/kg	J	J	Z	1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8015M	4/16/2013	PH027	2	1	PHCC21C30	EFH (C21-C30)	7.6		2.0	5.1	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8015M	4/16/2013	PH027	2	1	PHCC30C40	EFH (C30-C40)	53		4.1	10	mg/kg				1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8015M	4/16/2013	PH027	2	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8082A	4/19/2013	PH027	2	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8082A	4/19/2013	PH027	2	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8082A	4/19/2013	PH027	2	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8082A	4/19/2013	PH027	2	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8082A	4/19/2013	PH027	2	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8082A	4/19/2013	PH027	2	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767	LL	8082A	4/19/2013	PH027	2	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785144.831	267680.175	-118.71175	34.23347
SL-542-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016767																				



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	39001-02-0	OCDF	0.856	J	0.0232	10.2	ng/kg	JB	J	Z	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.09	U	0.0286	5.09	ng/kg	JBQ	U	B	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.09	U	0.0292	5.09	ng/kg	JB	U	B	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.02	U	0.0258	1.02	ng/kg	U			1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.09	U	0.0165	5.09	ng/kg	JB	U	B	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	57117-31-4	2,3,4,7,8-PECDF	5.09	U	0.0153	5.09	ng/kg	JBQ	U	B	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.09	U	0.0156	5.09	ng/kg	JBQ	U	B	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.09	U	0.0192	5.09	ng/kg	JB	U	B	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.164	J	0.0288	5.09	ng/kg	JB	J	Z	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.09	U	0.0185	5.09	ng/kg	JBQ	U	B	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	0.518	J	0.0128	5.09	ng/kg	JB	J	Z	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.09	U	0.0205	5.09	ng/kg	JB	U	B	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.0801	J	0.0194	5.09	ng/kg	JQ	J	Z	1785238.796	267652.664	-118.71144	34.233397	
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	1613B	4/13/2013	PH027	2.3	1	TCDD TEQ	TCDD TEQ	0.142		0	0	ng/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/22/2013	PH027	2.3	1	7440-42-8	BORON	9.84	U	0.817	9.84	mg/kg	U				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7429-90-5	ALUMINUM (FUME OR DUST)	10800		7.59	39.4	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7439-89-6	IRON	18200		3.74	39.4	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7439-92-1	LEAD	4.04		0.463	2.95	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7439-93-2	LITHIUM	25.1		0.54	3.9	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7439-95-4	MAGNESIUM	4210		1.70	9.84	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7439-96-5	MANGANESE	262		0.0817	0.984	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7439-98-7	MOLYBDENUM	1.97	U	0.167	1.97	mg/kg	U				1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-02-0	NICKEL	7.81		0.108	1.97	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-09-7	POTASSIUM	3280	J	13.3	98.4	mg/kg		J	Q		1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-23-5	SODIUM	66.5	J	16.4	98.4	mg/kg	J	J	Z		1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-31-5	TIN	9.84	U	0.217	9.84	mg/kg	J	U	B		1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-32-6	TITANIUM METAL POWDER	1000		0.167	0.984	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-36-0	ANTIMONY	3.94	UJ	0.492	3.94	mg/kg	U	UJ	Q		1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-38-2	ARSENIC	3.4	J	0.325	3.94	mg/kg	J	J	Z		1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-39-3	BARIUM	70.7		0.0325	0.984	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-41-7	BERYLLIUM	0.984	U	0.0659	0.984	mg/kg	J	U	B		1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-43-9	CADMIUM	0.984	U	0.0325	0.984	mg/kg	J	U	B		1785238.796	267652.664	-118.71144	34.233397
SL-544-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016773	LL	6010C	4/19/2013	PH027	2.3	1	7440-47-3	CHROMIUM	14.3		0.0866	2.95	mg/kg					1785238.796	267652.664	-118.71144	34.233397
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6020A	4/21/2013	PH028	3.8	2	7782-49-2	SELENIUM	0.416	U	0.104	0.416	mg/kg	U				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6020A	4/21/2013	PH028	3.8	2	7440-22-4	SILVER	0.208	U	0.0208	0.208	mg/kg	U				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6020A	4/21/2013	PH028	3.8	2	7440-24-6	STRONTIUM	11.3	J	0.0353	0.416	mg/kg		J	Q		1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6020A	4/21/2013	PH028	3.8	2	7440-28-0	THALLIUM	0.209		0.0312	0.208	mg/kg					1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	7471B	4/18/2013	PH028	3.8	1	7439-97-6	MERCURY	0.0203	U	0.0105	0.0203	mg/kg	U				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	8015M	4/19/2013	PH028	3.8	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	8015M	4/19/2013	PH028	3.8	1	PHCC15C20	EFH (C15-C20)	2.3	J	2.1	5.2	mg/kg	J	J	Z		1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	8015M	4/19/2013	PH028	3.8	1	PHCC21C30	EFH (C21-C30)	15		2.1	5.2	mg/kg					1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	8015M	4/19/2013	PH028	3.8	1	PHCC30C40	EFH (C3													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	8270D SIM	4/23/2013	PH028	3.8	1	91-20-3	NAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	8270D SIM	4/23/2013	PH028	3.8	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	9045M	4/11/2013	PH028	3.8	1	pH	PH	7.45		0.0100	0.0100	pH unit				1785021.081	267783.619	-118.71216	34.233752
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	160.3M	4/16/2013	PH028	3	1	MOIST	MOISTURE	3		0.10	0.10	%				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	1746-01-6	2,3,7,8-TCDD	0.991	U	0.0324	0.991	ng/kg	U			1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.787	J	0.0412	4.96	ng/kg	JB	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	3268-87-9	OCDD	228		0.0496	9.91	ng/kg	B			1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	21.7		0.0497	4.96	ng/kg	B			1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	39001-02-0	OCDF	6.59	J	0.0603	9.91	ng/kg	JB	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.372	J	0.0411	4.96	ng/kg	JBQ	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	4.96	U	0.0341	4.96	ng/kg	JBQ	U	B	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.991	U	0.0368	0.991	ng/kg	U			1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.405	J	0.0447	4.96	ng/kg	JB	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	57117-31-4	2,3,4,7,8-PECDF	4.96	U	0.0215	4.96	ng/kg	JB	U	B	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	4.96	U	0.0193	4.96	ng/kg	JB	U	B	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.262	J	0.0320	4.96	ng/kg	JB	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.86	J	0.0435	4.96	ng/kg	J	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.344	J	0.0347	4.96	ng/kg	JB	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	3.39	J	0.0210	4.96	ng/kg	JB	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	70648-26-9	1,2,3,4,7,8-HXCDF	4.96	U	0.0389	4.96	ng/kg	JB	U	B	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	72918-21-9	1,2,3,7,8,9-HXCDF	4.96	U	0.0478	4.96	ng/kg	U			1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	1613B	4/15/2013	PH028	3	1	TCDD TEQ	TCDD TEQ	0.616		0	0	ng/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/22/2013	PH028	3	1	7440-42-8	BORON	10.1	U	0.839	10.1	mg/kg	U			1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7429-90-5	ALUMINUM (FUME OR DUST)	9920		7.79	40.4	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7439-89-6	IRON	17500		3.84	40.4	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7439-92-1	LEAD	4.34		0.475	3.03	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7439-93-2	LITHIUM	26.9		0.56	4.0	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7439-95-4	MAGNESIUM	4960		1.75	10.1	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7439-96-5	MANGANESE	255		0.0839	1.01	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7439-98-7	MOLYBDENUM	2.02	U	0.172	2.02	mg/kg	U			1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-02-0	NICKEL	10		0.111	2.02	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-09-7	POTASSIUM	2950	J	13.6	101	mg/kg		J	Q	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-23-5	SODIUM	86.7	J	16.9	101	mg/kg	J	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-31-5	TIN	10.1	U	0.222	10.1	mg/kg	J	U	B	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-32-6	TITANIUM METAL POWDER	1000		0.172	1.01	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-36-0	ANTIMONY	4.04	UJ	0.505	4.04	mg/kg	U	UJ	Q	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-38-2	ARSENIC	3.35	J	0.334	4.04	mg/kg	J	J	Z	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-39-3	BARIUM	67.9		0.0334	1.01	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-41-7	BERYLLIUM	1.01	U	0.0677	1.01	mg/kg	J	U	B	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-43-9	CADMIUM	1.01	U	0.0334	1.01	mg/kg	J	U	B	1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-47-3	CHROMIUM	19		0.0889	3.03	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018432	LL	6010C	4/19/2013	PH028	3	1	7440-48-4	COBALT	4.27		0.0910	1.01	mg/kg				1784923.907	267762.555	-118.71248	34.233692
SL-552-SA7-SB-0.0-0.5																													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	1613B	5/7/2013	PH039	3.7	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.217	J	0.0231	5.01	ng/kg	JB	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	1613B	5/7/2013	PH039	3.7	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.171	J	0.0231	5.01	ng/kg	JB	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	1613B	5/7/2013	PH039	3.7	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.257	J	0.0329	5.01	ng/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	1613B	5/7/2013	PH039	3.7	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.01	U	0.0239	5.01	ng/kg	JBQ	U	B	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	1613B	5/7/2013	PH039	3.7	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	0.952	J	0.0210	5.01	ng/kg	JB	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	1613B	5/7/2013	PH039	3.7	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.209	J	0.0248	5.01	ng/kg	JBQ	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	1613B	5/7/2013	PH039	3.7	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.11	J	0.0251	5.01	ng/kg	JB	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	1613B	5/7/2013	PH039	3.7	1	TCDD TEQ	TCDD TEQ	0.159		0	0	ng/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7429-90-5	ALUMINUM (FUME OR DUST)	16000		7.77	40.3	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7439-89-6	IRON	26000		3.83	40.3	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7439-92-1	LEAD	8.97	J	0.474	3.02	mg/kg		J	E, Q	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7439-93-2	LITHIUM	31.8		0.55	4.0	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7439-95-4	MAGNESIUM	7080		1.74	10.1	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7439-96-5	MANGANESE	371		0.0837	1.01	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7439-98-7	MOLYBDENUM	2.02	U	0.171	2.02	mg/kg	J	U	F	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-02-0	NICKEL	14.6		0.111	2.02	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-09-7	POTASSIUM	4030	J	13.6	101	mg/kg		J	Q	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-23-5	SODIUM	101	U	16.8	101	mg/kg	J	U	F	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-31-5	TIN	10.1	U	0.222	10.1	mg/kg	J	U	B	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-32-6	TITANIUM METAL POWDER	1360		0.171	1.01	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-36-0	ANTIMONY	0.916	J	0.504	4.03	mg/kg	J	J	Q, Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-38-2	ARSENIC	3.92	J	0.333	4.03	mg/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-39-3	BARIUM	105		0.0333	1.01	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-41-7	BERYLLIUM	0.573	J	0.0675	1.01	mg/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-42-8	BORON	10.1	U	0.837	10.1	mg/kg		U	F	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-43-9	CADMIUM	0.302	J	0.0333	1.01	mg/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-47-3	CHROMIUM	26.1		0.0887	3.02	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-48-4	COBALT	6.43	J	0.0907	1.01	mg/kg		J	E	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-50-8	COPPER	16.2		0.181	2.02	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-62-2	VANADIUM (FUME OR DUST)	50		0.111	1.01	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-66-6	ZINC	61.3		0.202	4.03	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-67-7	ZIRCONIUM	2.98	J	0.837	5.04	mg/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7440-70-2	CALCIUM METAL	3680	J	4.05	20.2	mg/kg		J	E	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6010C	5/3/2013	PH039	3.7	1	7723-14-0	PHOSPHORUS	504	J	0.514	10.1	mg/kg		J	E	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6020A	5/6/2013	PH039	3.7	2	7782-49-2	SELENIUM	0.187	J	0.101	0.403	mg/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6020A	5/6/2013	PH039	3.7	2	7440-22-4	SILVER	0.0605	J	0.0202	0.202	mg/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6020A	5/6/2013	PH039	3.7	2	7440-24-6	STRONTIUM	21.7		0.0343	0.403	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	6020A	5/6/2013	PH039	3.7	2	7440-28-0	THALLIUM	0.329		0.0302	0.202	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	7471B	5/3/2013	PH039	3.7	1	7439-97-6	MERCURY	0.0175		0.0102	0.0170	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	8015M	5/2/2013	PH039	3.7	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	8015M	5/2/2013	PH039	3.7	1	PHCC15C20	EFH (C15-C20)	2.8	J	2.1	5.2	mg/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	8015M	5/2/2013	PH039	3.7	1	PHCC21C30	EFH (C21-C30)	20		2.1	5.2	mg/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	8015M	5/2/20																	



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	8270D SIM	5/1/2013	PH039	3.7	1	91-20-3	NAPHTHALENE	1.8		0.69	1.7	ug/kg				1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	8270D SIM	5/1/2013	PH039	3.7	1	91-57-6	2-METHYLNAPHTHALENE	1.2	J	0.69	1.7	ug/kg	J	J	Z	1785605.465	268179.378	-118.71024	34.234851
SL-506-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036186	LL	9045M	4/26/2013	PH039	3.7	1	pH	PH	6.23		0.0100	0.0100	pH unit				1785605.465	268179.378	-118.71024	34.234851
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	160.3M	5/1/2013	PH039	3.6	1	MOIST	MOISTURE	3.6		0.10	0.10	%				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	1746-01-6	2,3,7,8-TCDD	1.01	U	0.0275	1.01	ng/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.374	J	0.0492	5.05	ng/kg	JQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	3268-87-9	OCDD	123		0.0477	10.1	ng/kg	B			1785641.471	268119.464	-118.71012	34.234687
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	2385-85-5	MIREX	1.8	U	0.37	1.8	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	309-00-2	ALDRIN	0.87	U	0.18	0.87	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	319-84-6	ALPHA-BHC	0.87	U	0.18	0.87	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	319-85-7	BETA-BHC	2	U	1.0	2.0	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	319-86-8	DELTA-BHC	0.87	U	0.47	0.87	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	33213-65-9	ENDOSULFAN II	1.8	U	0.35	1.8	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	50-29-3	4,4'-DDT	6.5		0.37	1.8	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	53494-70-5	ENDRIN KETONE	1.9	U	0.63	1.9	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	57-74-9	CHLORDANE	18	U	8.2	18	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	58-89-9	gamma-BHC (Lindane)	0.87	U	0.18	0.87	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	60-57-1	DIELDRIN	1.8	U	0.60	1.8	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	72-20-8	ENDRIN	1.8	U	0.35	1.8	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	72-43-5	Methoxychlor	7	U	1.8	7.0	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	72-54-8	4,4'-DDD	1.8	U	0.35	1.8	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	72-55-9	4,4'-DDE	2.7		0.35	1.8	ug/kg				1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	7421-93-4	ENDRIN ALDEHYDE	1.8	U	0.35	1.8	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	76-44-8	HEPTACHLOR	0.18	J	0.18	0.87	ug/kg	J	J	Z	1785816.004	268167.926	-118.70954	34.234824
SL-511-SA7-SB-0.0-0.5	4/19/2013	N	0	0.5	ft	SO	7_DG		7029646	LL	8081B	4/27/2013	PH035	4.4	1	8001-35-2	Toxaphene	35	U	15	35	ug/kg	U			1785816.004	268167.926	-118.70954	34.234824
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8082A	4/27/2013	PH037	2.5	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8082A	4/27/2013	PH037	2.5	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8082A	4/27/2013	PH037	2.5	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8082A	4/27/2013	PH037	2.5	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8082A	4/27/2013	PH037	2.5	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	18	U	6.2	18	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	117-84-0	Di-n-octylphthalate	18	U	6.2	18	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	129-00-0	PYRENE	0.99	J	0.68	1.7	ug/kg	J	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.68	1.7	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.68	1.7	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	205-99-2	BENZO(B)FLUORANTHENE	1.1	J	0.68	1.7	ug/kg	J	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	206-44-0	FLUORANTHENE	1	J	0.68	1.7	ug/kg	J	J	Z	1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.68	1.7	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785610.132	268098.297	-118.71022	34.234628
SL-512-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032826	LL	8270D SIM	5/3/2013	PH037	2.5	1	218-01-9	Chrysene	0.9	J	0.34	1.7	ug/kg	J	J	Z	1			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7439-95-4	MAGNESIUM	3950		1.77	10.2	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7439-96-5	MANGANESE	228		0.0849	1.02	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7439-98-7	MOLYBDENUM	2.04	U	0.174	2.04	mg/kg	J	U	F	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-02-0	NICKEL	8.31	J	0.112	2.04	mg/kg		J	A	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-09-7	POTASSIUM	3300	J	13.8	102	mg/kg		J	Q	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-23-5	SODIUM	102	U	17.1	102	mg/kg	J	U	F	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-31-5	TIN	10.2	U	0.225	10.2	mg/kg	J	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-32-6	TITANIUM METAL POWDER	1080		0.174	1.02	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-36-0	ANTIMONY	0.545	J	0.511	4.09	mg/kg	J	J	Q, Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-38-2	ARSENIC	4.95		0.337	4.09	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-39-3	BARIUM	66.2		0.0337	1.02	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-41-7	BERYLLIUM	0.51	J	0.0685	1.02	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-42-8	BORON	10.2	U	0.849	10.2	mg/kg	J	U	F	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-43-9	CADMIUM	0.231	J	0.0337	1.02	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-47-3	CHROMIUM	16.1		0.0900	3.07	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-48-4	COBALT	3.9	J	0.0920	1.02	mg/kg		J	E	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-50-8	COPPER	10.7		0.184	2.04	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-62-2	VANADIUM (FUME OR DUST)	31.7		0.112	1.02	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-66-6	ZINC	53.1		0.204	4.09	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-67-7	ZIRCONIUM	2.29	J	0.849	5.11	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7440-70-2	CALCIUM METAL	3910	J	4.11	20.4	mg/kg		J	E	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6010C	5/3/2013	PH037	4.1	1	7723-14-0	PHOSPHORUS	305	J	0.521	10.2	mg/kg		J	E, A	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6020A	5/6/2013	PH037	4.1	2	7782-49-2	SELENIUM	0.182	J	0.102	0.409	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6020A	5/6/2013	PH037	4.1	2	7440-22-4	SILVER	0.0696		0.0204	0.204	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6020A	5/6/2013	PH037	4.1	2	7440-24-6	STRONTIUM	26.5		0.0348	0.409	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	6020A	5/6/2013	PH037	4.1	2	7440-28-0	THALLIUM	0.286		0.0307	0.204	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	7471B	4/26/2013	PH037	4.1	1	7439-97-6	MERCURY	0.0311		0.0102	0.0164	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8015M	4/27/2013	PH037	4.1	5	PHCC12C14	EFH (C12-C14)	26	U	10	26	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8015M	4/27/2013	PH037	4.1	5	PHCC15C20	EFH (C15-C20)	26	U	10	26	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8015M	4/27/2013	PH037	4.1	5	PHCC21C30	EFH (C21-C30)	23	J	10	26	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8015M	4/27/2013	PH037	4.1	5	PHCC30C40	EFH (C30-C40)	72	J	21	52	mg/kg		J	L	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8015M	4/27/2013	PH037	4.1	5	PHCC8C11	EFH (C8-C11)	26	U	10	26	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	11096-82-5	Aroclor 1260	18	U	4.1	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	11097-69-1	Aroclor 1254	47		4.6	18	ug/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-0.0-0.5	4/23/2013	N	0	0.5	ft	SO	7_DG		7032827	LL	8082A	4/27/2013	PH037	4.1	1	53469-21-9	Aroclor 1242	18	U	3.4	18	ug/kg	U						



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8082A	4/23/2013	PH031	3.6	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8082A	4/23/2013	PH031	3.6	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	19		6.2	19	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	120-12-7	ANTHRACENE	1.6	J	0.34	1.7	ug/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	129-00-0	PYRENE	13		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	192-97-2	Benzo(e)pyrene	3.5	J	3.4	18	ug/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.4	J	0.69	1.7	ug/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	205-99-2	BENZO(B)FLUORANTHENE	7.8		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	206-44-0	FLUORANTHENE	16		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	207-08-9	BENZO(K)FLUORANTHENE	2.5		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	208-96-8	ACENAPHTHYLENE	0.4	J	0.34	1.7	ug/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	218-01-9	Chrysene	9.3		0.34	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	50-32-8	BENZO(A)PYRENE	2.1		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	56-55-3	BENZO(A)ANTHRACENE	2.7		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	85-01-8	PHENANTHRENE	14		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	86-73-7	FLUORENE	1.2	J	0.69	1.7	ug/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	90-12-0	1-METHYLNAPHTHALENE	0.94	J	0.69	1.7	ug/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	91-20-3	NAPHTHALENE	2.6		0.69	1.7	ug/kg				1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	8270D SIM	4/25/2013	PH031	3.6	1	91-57-6	2-METHYLNAPHTHALENE	1.5	J	0.69	1.7	ug/kg	J	J	Z	1785727.547	267927.153	-118.70983	34.23416
SL-522-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023139	LL	9045M	4/17/2013	PH031	3.6	1	pH	PH	6.84		0.0100	0.0100	pH unit				1785727.547	267927.153	-118.70983	34.23416
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	160.3M	4/23/2013	PH031	4.6	1	MOIST	MOISTURE	4.6		0.10	0.10	%				1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	1746-01-6	2,3,7,8-TCDD	0.029	J	0.0229	1.04	ng/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.19	U	0.0212	5.19	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	3268-87-9	OCDD	7.49	J	0.0224	10.4	ng/kg	JB	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	0.643	J	0.0258	5.19	ng/kg	JBQ	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	39001-02-0	OCDF	10.4	U	0.0373	10.4	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.19	U	0.0222	5.19	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.19	U	0.0223	5.19	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.04	U	0.0215	1.04	ng/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.19	U	0.0137	5.19	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	57117-31-4	2,3,4,7,8-PECDF	5.19	U	0.0126	5.19	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.19	U	0.0125	5.19	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	1613B	4/18/2013	PH031	4.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.19	U	0.0128	5.19	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8015M	4/23/2013	PH031	4.6	1	PHCC15C20	EFH (C15-C20)	2.8	J	2.1	5.2	mg/kg	J			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8015M	4/23/2013	PH031	4.6	1	PHCC21C30	EFH (C21-C30)	8.1	J	2.1	5.2	mg/kg		J	Q	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8015M	4/23/2013	PH031	4.6	1	PHCC30C40	EFH (C30-C40)	12	J	4.2	10	mg/kg		J	Q	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8015M	4/23/2013	PH031	4.6	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8015M	4/16/2013	PH031	4.6	25.77	GROC5C12	GASOLINE RANGE ORGANICS (C5-C12)	1.1	U	0.2	1.1	mg/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	11096-82-5	Aroclor 1260	18	U	4.0	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	11097-69-1	Aroclor 1254	18	U	4.5	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	11141-16-5	Aroclor 1232	18	U	4.2	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	53469-21-9	Aroclor 1242	18	U	3.4	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8082A	4/23/2013	PH031	4.6	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	8	J	6.2	19	ug/kg	J	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	120-12-7	ANTHRACENE	1.7	U	0.35	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	129-00-0	PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	205-99-2	BENZO(B)FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	206-44-0	FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	207-08-9	FLUOROANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	218-01-9	Chrysene	1.7	U	0.35	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-5.5-6.5	4/15/2013	N	5.5	6.5	ft	SO	7_DG		7023136	LL	8270D SIM	4/25/2013	PH031	4.6	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.289	J	0.0248	5.15	ng/kg	JB	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	57117-31-4	2,3,4,7,8-PECDF	0.156	J	0.0173	5.15	ng/kg	JBQ	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.15	U	0.0188	5.15	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.204	J	0.0278	5.15	ng/kg	JBQ	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.701	J	0.0411	5.15	ng/kg	JB	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.349	J	0.0275	5.15	ng/kg	JBQ	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	2.74	J	0.0189	5.15	ng/kg	JB	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.253	J	0.0291	5.15	ng/kg	JB	J	Z	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.15	U	0.0303	5.15	ng/kg	JBQ	U	B	1785156.074	268004.234	-118.71172	34.234361
SL-534-SA7-SB-0.0-0.5	4/12/2013	N	0	0.5	ft	SO	7_DG		7022152	LL	1613B	4/18/2013	PH030	3.7	1	TCDD TEO	TCDD TEO	0.812		0	0	ng/kg				17			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-32-6	TITANIUM METAL POWDER	1110		0.172	1.01	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-36-0	ANTIMONY	1.73	J	0.507	4.05	mg/kg	J	J	Q, Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-38-2	ARSENIC	2.5	J	0.334	4.05	mg/kg	J	J	Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-39-3	BARIUM	73.3		0.0334	1.01	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-41-7	BERYLLIUM	0.477	J	0.0679	1.01	mg/kg	J	J	Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-42-8	BORON	2.96	J	0.841	10.1	mg/kg	J	J	Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-43-9	CADMIUM	0.511	J	0.0334	1.01	mg/kg	J	J	Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-47-3	CHROMIUM	16.5		0.0892	3.04	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-48-4	COBALT	5.33		0.0912	1.01	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-50-8	COPPER	6.31		0.182	2.03	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-62-2	ZINCADIUM (FUME OR DUST)	31		0.111	1.01	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-66-6	VANAD	62.8		0.203	4.05	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-67-7	ZIRCONIUM	0.916	J	0.841	5.07	mg/kg	J	J	Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7440-70-2	CALCIUM METAL	3020		4.07	20.3	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6010C	4/21/2013	PH031	2.3	1	7723-14-0	PHOSPHORUS	466	J	0.517	10.1	mg/kg		J	Q	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6020A	4/21/2013	PH031	2.3	2	7782-49-2	SELENIUM	0.405	U	0.101	0.405	mg/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6020A	4/21/2013	PH031	2.3	2	7440-22-4	SILVER	0.0361	J	0.0203	0.203	mg/kg	J	J	Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6020A	4/21/2013	PH031	2.3	2	7440-24-6	STRONTIUM	11.3		0.0345	0.405	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	6020A	4/21/2013	PH031	2.3	2	7440-28-0	THALLIUM	0.25		0.0304	0.203	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	7471B	4/18/2013	PH031	2.3	1	7439-97-6	MERCURY	0.0156	J	0.0105	0.0203	mg/kg	J	J	Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8015M	4/23/2013	PH031	2.3	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8015M	4/23/2013	PH031	2.3	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8015M	4/23/2013	PH031	2.3	1	PHCC21C30	EFH (C21-C30)	6		2.0	5.1	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8015M	4/23/2013	PH031	2.3	1	PHCC30C40	EFH (C30-C40)	12		4.1	10	mg/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	11096-82-5	Aroclor 1260	11	J	3.9	17	ug/kg	J	J	S, Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	11097-69-1	Aroclor 1254	17	U	4.4	17	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	11126-42-4	Aroclor 5460	33	U	10	33	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	53469-21-9	Aroclor 1242	17	U	3.3	17	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8082A	4/23/2013	PH031	2.3	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8270D SIM	4/25/2013	PH031	2.3	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	32		6.1	18	ug/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8270D SIM	4/25/2013	PH031	2.3	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8270D SIM	4/25/2013	PH031	2.3	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8270D SIM	4/25/2013	PH031	2.3	1	129-00-0	PYRENE	3.1		0.68	1.7	ug/kg				1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8270D SIM	4/25/2013	PH031	2.3	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8270D SIM	4/25/2013	PH031	2.3	1	191-24-2	BENZO(G,H,I)PERYLENE	1.6	J	0.68	1.7	ug/kg	J	J	Z	1785163.374	267925.565	-118.7117	34.234145
SL-537-SA7-SB-0.0-0.5	4/15/2013	N	0	0.5	ft	SO	7_DG		7023137	LL	8270D SIM	4/25/2013	PH031	2.3	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			17851			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8082A	4/23/2013	PH033	3.5	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8082A	4/23/2013	PH033	3.5	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.2	19	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	129-00-0	PYRENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	192-97-2	Benzo(e)pyrene	18	U	3.4	18	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	205-99-2	BENZO(B)FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	206-44-0	FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	207-08-9	BENZO(K)FLUORANTHENE	4.4		0.69	1.7	ug/kg				1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	218-01-9	Chrysene	0.47	J	0.34	1.7	ug/kg	J	J	Z	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	84-74-2	Di-n-butylphthalate	24	J	6.2	19	ug/kg		J	Q	1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	85-01-8	PHENANTHRENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.2	19	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	86-73-7	FLUORENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	91-20-3	NAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	8270D SIM	4/28/2013	PH033	3.5	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1784521.612	267522.013	-118.71381	34.233024
SL-558-SA7-SB-3.0-4.0	4/17/2013	N	3	4	ft	SO	7_DG		7026476	LL	9045M	4/18/2013	PH033	3.5	1	pH	PH	7.43		0.0100	0.0100	pH unit				1784521.612	267522.013	-118.71381	34.233024
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	160_3M	4/25/2013	PH034	2.9	1	MOIST	MOISTURE	2.9		0.10	0.10	%				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	1746-01-6	2,3,7,8-TCDD	1.02	U	0.0266	1.02	ng/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.364	J	0.0291	5.09	ng/kg	JB		Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	3268-87-9	OCDD	91.8		0.0241	10.2	ng/kg	B			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	8.58		0.0343	5.09	ng/kg	B			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	39001-02-0	OCDF	2.99	J	0.0281	10.2	ng/kg	JB	J	Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.266	J	0.0310	5.09	ng/kg	JB	J	Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.208	J	0.0299	5.09	ng/kg	JB	J	Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.131	J	0.0512	1.02	ng/kg	JQ	J	Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.132	J	0.0234	5.09	ng/kg	JB	J	Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	57117-31-4	2,3,4,7,8-PECDF	0.432	J	0.0248	5.09	ng/kg	JB	J	Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.327	J	0.0260	5.09	ng/kg	JBQ	J	Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	1613B	4/25/2013	PH034	2.9	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.167	J	0.0256	5.09	ng/kg	JBO	J	Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N</																											



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8015M	4/26/2013	PH034	2.9	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.1	5.1	mg/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8015M	4/26/2013	PH034	2.9	1	PHCC21C30	EFH (C21-C30)	15		2.1	5.1	mg/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8015M	4/26/2013	PH034	2.9	1	PHCC30C40	EFH (C30-C40)	44	J	4.1	10	mg/kg		J	L	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8015M	4/26/2013	PH034	2.9	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.1	5.1	mg/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	11096-82-5	Aroclor 1260	18	U	4.0	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	11097-69-1	Aroclor 1254	18	U	4.5	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	11141-16-5	Aroclor 1232	18	U	4.2	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	53469-21-9	Aroclor 1242	18	U	3.4	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8082A	4/27/2013	PH034	2.9	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	48		6.2	18	ug/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	117-84-0	Di-n-octylphthalate	18	U	6.2	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	120-12-7	ANTHRACENE	1.7	U	0.34	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	129-00-0	PYRENE	3.3		0.68	1.7	ug/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	191-24-2	BENZO(G,H,I)PERYLENE	1.5	J	0.68	1.7	ug/kg	J		Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.2	J	0.68	1.7	ug/kg	J		Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	205-99-2	BENZO(B)FLUORANTHENE	4.5		0.68	1.7	ug/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	206-44-0	FLUORANTHENE	3.4		0.68	1.7	ug/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	207-08-9	BENZO(K)FLUORANTHENE	6.8		0.68	1.7	ug/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	218-01-9	Chrysene	2.9		0.34	1.7	ug/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	50-32-8	BENZO(A)PYRENE	1.9		0.68	1.7	ug/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.68	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	56-55-3	BENZO(A)ANTHRACENE	1.4	J	0.68	1.7	ug/kg	J		Z	1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	84-66-2	DIETHYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	84-74-2	Di-n-butylphthalate	18	U	6.2	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	85-01-8	PHENANTHRENE	1.8		0.68	1.7	ug/kg				1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	86-73-7	FLUORENE	1.7	U	0.68	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	91-20-3	NAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-530-SA7-SB-0.0-0.5	4/18/2013	N	0	0.5	ft	SO	7_DG		7028430	LL	8270D SIM	4/30/2013	PH034	2.9	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.68	1.7	ug/kg	U			1785400.814	267987.298	-118.71091	34.234319
SL-539-SA7-SB-0.0-0.5	4/8/2013	N	0	0.5	ft	SO	7_DG		7016766	LL	8270D SIM	4/23/2013	PH027	2.4	10	83-32-9	ACENAPHTHENE	17	U	6.8	17								



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-09-7	POTASSIUM	3560	J	13.8	102	mg/kg		Q		1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-23-5	SODIUM	69.3	J	17.1	102	mg/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-31-5	TIN	10.2	U	0.225	10.2	mg/kg	J	U	B	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-32-6	TITANIUM METAL POWDER	888		0.174	1.02	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-36-0	ANTIMONY	4.1	UJ	0.512	4.10	mg/kg	U	UJ	Q	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-38-2	ARSENIC	4.19		0.338	4.10	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-39-3	BARIUM	72.7		0.0338	1.02	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-41-7	BERYLLIUM	0.556	J	0.0686	1.02	mg/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-43-9	CADMIUM	0.0727	J	0.0338	1.02	mg/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-47-3	CHROMIUM	15.2		0.0901	3.07	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-48-4	COBALT	4.28		0.0921	1.02	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-50-8	COPPER	6.71		0.184	2.05	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-62-2	VANADIUM (FUME OR DUST)	29.8		0.113	1.02	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-66-6	ZINC	55.8		0.205	4.10	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-67-7	ZIRCONIUM	0.921	J	0.850	5.12	mg/kg	J	J	FD, Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7440-70-2	CALCIUM METAL	3100	J	4.12	20.5	mg/kg		J	E	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6010C	4/19/2013	PH027	3.3	1	7723-14-0	PHOSPHORUS	399	J	0.522	10.2	mg/kg		J	Q	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6020A	4/20/2013	PH027	3.3	2	7782-49-2	SELENIUM	0.102	J	0.102	0.410	mg/kg	J	J	FD, Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6020A	4/20/2013	PH027	3.3	2	7440-22-4	SILVER	0.024	J	0.0205	0.205	mg/kg	J	J	FD, Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6020A	4/20/2013	PH027	3.3	2	7440-24-6	STRONTIUM	19.4	J	0.0348	0.410	mg/kg		J	Q	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	6020A	4/20/2013	PH027	3.3	2	7440-28-0	THALLIUM	0.223		0.0307	0.205	mg/kg				1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	7199	4/19/2013	PH027	3.3	1	18540-29-9	CHROMIUM (HEXVALENT COMPOUNDS)	0.37	J	0.15	0.42	mg/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	7471B	4/18/2013	PH027	3.3	1	7439-97-6	MERCURY	0.0201	U	0.0104	0.0201	mg/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8015M	4/16/2013	PH027	3.3	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8015M	4/16/2013	PH027	3.3	1	PHCC15C20	EFH (C15-C20)	3	J	2.0	5.1	mg/kg	J	J	Q, Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8015M	4/16/2013	PH027	3.3	1	PHCC21C30	EFH (C21-C30)	4.9	J	2.0	5.1	mg/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8015M	4/16/2013	PH027	3.3	1	PHCC30C40	EFH (C30-C40)	17	J	4.1	10	mg/kg		J	FD, Q	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8015M	4/16/2013	PH027	3.3	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	11096-82-5	Aroclor 1260	18	U	4.0	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	11097-69-1	Aroclor 1254	18	U	4.6	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	11141-16-5	Aroclor 1232	18	U	4.2	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	53469-21-9	Aroclor 1242	18	U	3.4	18	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8082A	4/19/2013	PH027	3.3	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8270D SIM	4/23/2013	PH027	3.3	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	15	J	6.2	19	ug/kg	J	J	Z	1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8270D SIM	4/23/2013	PH027	3.3	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785163.043	267731.637	-118.71169	34.233612
SL-540-SA7-SB-0.0-0.5	4/9/2013	N	0	0.5	ft	SO	7_DG		7016768	LL	8270D SIM	4/23/2013	PH027	3.3	1	120-12-7	ANTHRACENE	1.7	U										



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7429-90-5	ALUMINUM (FUME OR DUST)	12000		7.81	40.5	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7439-89-6	IRON	18600		3.85	40.5	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7439-92-1	LEAD	7.1		0.476	3.04	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7439-93-2	LITHIUM	23.9		0.56	4.1	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7439-95-4	MAGNESIUM	4090		1.75	10.1	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7439-96-5	MANGANESE	251		0.0841	1.01	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7439-98-7	MOLYBDENUM	2.03	U	0.172	2.03	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-02-0	NICKEL	8.2		0.111	2.03	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-09-7	POTASSIUM	3880	J	13.7	101	mg/kg		J	Q	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-23-5	SODIUM	65	J	16.9	101	mg/kg	J	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-31-5	TIN	10.1	U	0.223	10.1	mg/kg	J	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-32-6	TITANIUM METAL POWDER	982		0.172	1.01	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-36-0	ANTIMONY	4.05	UJ	0.506	4.05	mg/kg	U	UJ	Q	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-38-2	ARSENIC	4.03	J	0.334	4.05	mg/kg	J	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-39-3	BARIUM	77.6		0.0334	1.01	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-41-7	BERYLLIUM	1.01	U	0.0679	1.01	mg/kg	J	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-43-9	CADMIUM	1.01	U	0.0334	1.01	mg/kg	J	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-47-3	CHROMIUM	13.9		0.0891	3.04	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-48-4	COBALT	3.73		0.0912	1.01	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-50-8	COPPER	6.2		0.182	2.03	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-62-2	VANADIUM (FUME OR DUST)	28.6		0.111	1.01	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-66-6	ZINC	72.3		0.203	4.05	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-67-7	ZIRCONIUM	5.06	U	0.841	5.06	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7440-70-2	CALCIUM METAL	2720	J	4.07	20.3	mg/kg		J	E	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6010C	4/19/2013	PH028	3.2	1	7723-14-0	PHOSPHORUS	405	J	0.517	10.1	mg/kg		J	Q	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6020A	4/21/2013	PH028	3.2	2	7782-49-2	SELENIUM	0.405	U	0.101	0.405	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6020A	4/21/2013	PH028	3.2	2	7440-22-4	SILVER	0.0411	J	0.0203	0.203	mg/kg	J	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6020A	4/21/2013	PH028	3.2	2	7440-24-6	STRONTIUM	12.3	J	0.0344	0.405	mg/kg		J	Q	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	6020A	4/21/2013	PH028	3.2	2	7440-28-0	THALLIUM	0.253		0.0304	0.203	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	7471B	4/18/2013	PH028	3.2	1	7439-97-6	MERCURY	0.011	J	0.0101	0.0196	mg/kg	J	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8015M	4/19/2013	PH028	3.2	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8015M	4/19/2013	PH028	3.2	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8015M	4/19/2013	PH028	3.2	1	PHCC21C30	EFH (C21-C30)	13		2.1	5.2	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8015M	4/19/2013	PH028	3.2	1	PHCC30C40	EFH (C30-C40)	29		4.1	10	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8015M	4/19/2013	PH028	3.2	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8082A	4/20/2013	PH028	3.2	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8082A	4/20/2013	PH028	3.2	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8082A	4/20/2013	PH028	3.2	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8082A	4/20/2013	PH028	3.2	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8082A	4/20/2013	PH028	3.2	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8082A	4/20/2013	PH028	3.2	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8082A	4/20/2013	PH028	3.2	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-0.0-0.5	4/10/2013	N	0	0.5	ft	SO	7_DG		7018433	LL	8082A	4/20/2013	PH028	3.2	1	12672-29-6	Aroclor 1248	17	U	3.4	17</								



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.161	J	0.0319	5.03	ng/kg	JBQ	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.03	U	0.0317	5.03	ng/kg	JBQ	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0596	J	0.0370	1.01	ng/kg	JQ	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.03	U	0.0272	5.03	ng/kg	JB	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	57117-31-4	2,3,4,7,8-PECDF	5.03	U	0.0192	5.03	ng/kg	JBQ	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.03	U	0.0175	5.03	ng/kg	JBQ	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.182	J	0.0249	5.03	ng/kg	JB	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.472	J	0.0332	5.03	ng/kg	J	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.238	J	0.0283	5.03	ng/kg	JB	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	2.24	J	0.0122	5.03	ng/kg	JB	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.03	U	0.0313	5.03	ng/kg	JB	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.03	U	0.0412	5.03	ng/kg	JBQ	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	1613B	4/15/2013	PH028	3.8	1	TCDD TEQ	TCDD TEQ	0.353		0	0	ng/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/22/2013	PH028	3.8	1	7440-42-8	BORON	10.4	U	0.863	10.4	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7429-90-5	ALUMINUM (FUME OR DUST)	11300		8.01	41.6	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7439-89-6	IRON	18100		3.95	41.6	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7439-92-1	LEAD	4.81		0.489	3.12	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7439-93-2	LITHIUM	26.1		0.57	4.2	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7439-95-4	MAGNESIUM	4490		1.80	10.4	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7439-96-5	MANGANESE	283		0.0863	1.04	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7439-98-7	MOLYBDENUM	2.08	U	0.177	2.08	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-02-0	NICKEL	8.96		0.114	2.08	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-09-7	POTASSIUM	3280	J	14.0	104	mg/kg		J	Q	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-23-5	SODIUM	62.5	J	17.4	104	mg/kg	J	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-31-5	TIN	10.4	U	0.229	10.4	mg/kg	J	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-32-6	TITANIUM METAL POWDER	1040		0.177	1.04	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-36-0	ANTIMONY	4.16	UJ	0.520	4.16	mg/kg	U	UJ	Q	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-38-2	ARSENIC	4.02	J	0.343	4.16	mg/kg	J	J	Z	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-39-3	BARIUM	77.4		0.0343	1.04	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-41-7	BERYLLIUM	1.04	U	0.0696	1.04	mg/kg	J	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-43-9	CADMIUM	1.04	U	0.0343	1.04	mg/kg	J	U	B	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-47-3	CHROMIUM	15.6		0.0915	3.12	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-48-4	COBALT	4.09		0.0936	1.04	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-50-8	COPPER	5.44		0.187	2.08	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-62-2	VANADIUM (FUME OR DUST)	30.4		0.114	1.04	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-66-6	ZINC	55.2		0.208	4.16	mg/kg				1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-67-7	ZIRCONIUM	5.2	U	0.863	5.20	mg/kg	U			1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7440-70-2	CALCIUM METAL	4750	J	4.18	20.8	mg/kg		J	E	1785021.081	267783.619	-118.71216	34.233752
SL-551-SA7-SB-2.0-3.0	4/10/2013	N	2	3	ft	SO	7_DG		7018434	LL	6010C	4/19/2013	PH028	3.8	1	7723-14-0	PHOSPHORUS	366	J	0.530	10.4	mg/kg		J	Q	1785021.081	267783.619	-118.71216	34.233752
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	83-32-9	ACENAPHTHENE	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	84-66-2	DIETHYL PHTHALATE	20	U	6.7	20	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	84-74-2	Di-n-butylphthalate	20	U	6.7	20	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft																								



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-36-0	ANTIMONY	1.73	J	0.505	4.04	mg/kg	J		Q, Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-38-2	ARSENIC	2.59	J	0.333	4.04	mg/kg	J		Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-39-3	BARIUM	108		0.0333	1.01	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-41-7	BERYLLIUM	0.562	J	0.0677	1.01	mg/kg	J		Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-42-8	BORON	4.91	J	0.839	10.1	mg/kg	J		Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-43-9	CADMIUM	0.581	J	0.0333	1.01	mg/kg	J		Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-47-3	CHROMIUM	19.9		0.0889	3.03	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-48-4	COBALT	5.85		0.0909	1.01	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-50-8	COPPER	9.12		0.182	2.02	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-62-2	VANADIUM (FUME OR DUST)	36		0.111	1.01	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-66-6	ZINC	96.8		0.202	4.04	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-67-7	ZIRCONIUM	5.05	U	0.839	5.05	mg/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7440-70-2	CALCIUM METAL	4290		4.06	20.2	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6010C	4/21/2013	PH032	3.9	1	7723-14-0	PHOSPHORUS	601	J	0.515	10.1	mg/kg		J	Q	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6020A	4/21/2013	PH032	3.9	2	7782-49-2	SELENIUM	0.14	J	0.101	0.404	mg/kg	J		Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6020A	4/21/2013	PH032	3.9	2	7440-22-4	SILVER	0.0434	J	0.0202	0.202	mg/kg	J		Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6020A	4/21/2013	PH032	3.9	2	7440-24-6	STRONTIUM	35		0.0343	0.404	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	6020A	4/21/2013	PH032	3.9	2	7440-28-0	THALLIUM	0.24		0.0303	0.202	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	7471B	4/18/2013	PH032	3.9	1	7439-97-6	MERCURY	0.0299		0.0105	0.0204	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8015M	4/24/2013	PH032	3.9	5	PHCC12C14	EFH (C12-C14)	26	U	10	26	mg/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8015M	4/24/2013	PH032	3.9	5	PHCC15C20	EFH (C15-C20)	11	J	10	26	mg/kg	J		Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8015M	4/24/2013	PH032	3.9	5	PHCC21C30	EFH (C21-C30)	52		10	26	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8015M	4/24/2013	PH032	3.9	5	PHCC30C40	EFH (C30-C40)	230		21	52	mg/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8015M	4/24/2013	PH032	3.9	5	PHCC8C11	EFH (C8-C11)	26	U	10	26	mg/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8082A	4/23/2013	PH032	3.9	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8270D SIM	4/25/2013	PH032	3.9	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	8.8	J	6.2	19	ug/kg	J		J	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8270D SIM	4/25/2013	PH032	3.9	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8270D SIM	4/25/2013	PH032	3.9	1	120-12-7	ANTHRACENE	2.3		0.35	1.7	ug/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8270D SIM	4/25/2013	PH032	3.9	1	129-00-0	PYRENE	38		0.69	1.7	ug/kg				1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8270D SIM	4/25/2013	PH032	3.9	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8270D SIM	4/25/2013	PH032	3.9	1	191-24-2	BENZO(G,H,I)PERYLENE	1.6	J	0.69	1.7	ug/kg	J		Z	1784441.699	267425.648	-118.71407	34.232757
SL-561-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024688	LL	8270D SIM	4/25/2013	PH032	3.9	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U		</				



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	1613B	5/1/2013	PH036	3.7	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.175	J	0.0249	5.00	ng/kg	JBQ	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	1613B	5/1/2013	PH036	3.7	1	TCDD TEQ	TCDD TEQ	1.32		0	0	ng/kg				1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	160.3M	4/25/2013	PH036	3.7	1	MOIST	MOISTURE	3.7		0.10	0.10	%				1785804.977	268200.546	-118.70958	34.234913
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	9045M	4/23/2013	PH036	5.5	1	pH	PH	7.33		0.0100	0.0100	pH unit				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	6.6	J	6.3	19	ug/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	117-84-0	Di-n-octylphthalate	19	U	6.3	19	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	120-12-7	ANTHRACENE	1.8	U	0.35	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	129-00-0	PYRENE	1.1	J	0.71	1.8	ug/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	191-24-2	BENZO(G,H,I)PERYLENE	0.74	J	0.71	1.8	ug/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.8	U	0.71	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	205-99-2	BENZO(B)FLUORANTHENE	1.8		0.71	1.8	ug/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	206-44-0	FLUORANTHENE	1.3	J	0.71	1.8	ug/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	207-08-9	BENZO(K)FLUORANTHENE	12		0.71	1.8	ug/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	208-96-8	ACENAPHTHYLENE	1.8	U	0.35	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	218-01-9	Chrysene	2.2		0.35	1.8	ug/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	50-32-8	BENZO(A)PYRENE	0.85	J	0.71	1.8	ug/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.8	U	0.71	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	56-55-3	BENZO(A)ANTHRACENE	1.8	U	0.71	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.8	U	0.71	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	83-32-9	ACENAPHTHENE	1.8	U	0.71	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	84-66-2	DIETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	84-74-2	Di-n-butylphthalate	19	U	6.3	19	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	85-01-8	PHENANTHRENE	0.84	J	0.71	1.8	ug/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	86-73-7	FLUORENE	0.86	J	0.71	1.8	ug/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	90-12-0	1-METHYLNAPHTHALENE	1.8	U	0.71	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	91-20-3	NAPHTHALENE	1.8	U	0.71	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8270D SIM	4/30/2013	PH036	5.5	1	91-57-6	2-METHYLNAPHTHALENE	1.8	U	0.71	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	11096-82-5	Aroclor 1260	18	U	4.1	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	11097-69-1	Aroclor 1254	8.3	J	4.6	18	ug/kg	J	J	S, Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	11100-14-4	Aroclor 1268	18	U	3.5	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	11126-42-4	Aroclor 5460	13	J	10	35	ug/kg	J	J	S, Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	12642-23-8	Aroclor 5442	35	U	10	35	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	12672-29-6	Aroclor 1248	18	U	3.5	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	12674-11-2	Aroclor 1016	18	U	3.5	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	37324-23-5	Aroclor 1262	18	U	3.5	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	53469-21-9	Aroclor 1242	18	U	3.5	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8082A	4/27/2013	PH036	5.5	1	63496-31-1	Aroclor 5432	35	U	10	35	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	8081B	4/27/2013	PH036	5.5	1	1024-57-3	HEPTACHLOR EPOXIDE	0.88	U	0.65	0.88	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA																													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7439-98-7	MOLYBDENUM	2.07	U	0.176	2.07	mg/kg	J	U	F	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-02-0	NICKEL	10.3		0.114	2.07	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-09-7	POTASSIUM	3060	J	14.0	104	mg/kg		J	Q	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-23-5	SODIUM	104	U	17.3	104	mg/kg	J	U	F	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-31-5	TIN	10.4	U	0.228	10.4	mg/kg	J	U	B	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-32-6	TITANIUM METAL POWDER	1180		0.176	1.04	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-36-0	ANTIMONY	0.826	J	0.519	4.15	mg/kg	J	J	Q, Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-38-2	ARSENIC	5.06		0.342	4.15	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-39-3	BARIUM	82.5		0.0342	1.04	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-41-7	BERYLLIUM	0.657	J	0.0695	1.04	mg/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-42-8	BORON	10.4	U	0.861	10.4	mg/kg	J	U	B, F	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-43-9	CADMIUM	0.0757	J	0.0342	1.04	mg/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-47-3	CHROMIUM	18.3		0.0913	3.11	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-48-4	COBALT	4.82		0.0934	1.04	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-50-8	COPPER	12.4		0.187	2.07	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-62-2	VANADIUM (FUME OR DUST)	35.4		0.114	1.04	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-66-6	ZINC	62		0.207	4.15	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-67-7	ZIRCONIUM	2.53	J	0.861	5.19	mg/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7440-70-2	CALCIUM METAL	2380		4.17	20.7	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	6010C	4/28/2013	PH036	5.5	1	7723-14-0	PHOSPHORUS	339		0.529	10.4	mg/kg				1785836.347	268285.98	-118.70948	34.235148
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	20	U	6.7	20	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	117-84-0	Di-n-octylphthalate	20	U	6.7	20	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	120-12-7	ANTHRACENE	1.9	U	0.37	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	129-00-0	PYRENE	1.2	J	0.75	1.9	ug/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	131-11-3	DIMETHYL PHTHALATE	20	U	6.7	20	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	191-24-2	BENZO(G,H,I)PERYLENE	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	192-97-2	Benzo(e)pyrene	19	U	3.7	19	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	205-99-2	BENZO(B)FLUORANTHENE	1.3	J	0.75	1.9	ug/kg	J	J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	206-44-0	FLUORANTHENE	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	207-08-9	BENZO(K)FLUORANTHENE	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	208-96-8	ACENAPHTHYLENE	1.9	U	0.37	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	218-01-9	Chrysene	2.2		0.37	1.9	ug/kg				1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	50-32-8	BENZO(A)PYRENE	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	56-55-3	BENZO(A)ANTHRACENE	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-3.0-4.0	4/16/2013	N	3	4	ft	SO	7_DG		7024687	LL	8270D SIM	4/25/2013	PH032	10.9	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.9	U	0.75	1.9	ug/kg	U			1784525.385	267430.268	-118.7138	34.232772
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	1613B	5/2/2013	PH036	2.1	1	1746-01-6	2,3,7,8-TCDD	0.126	J	0.0248	1.02	ng/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	1613B	5/2/2013	PH036	2.1	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	3.72	J	0.0388	5.08	ng/kg	JB	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	1613B	5/2/2013	PH036	2.1	1	3268-87-9	OCDD	1350		0.0489	10.2	ng/kg	B			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	1613B	5/2/2013	PH036	2.1	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	187		0.0706	5.08	ng/kg	B			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	1613B	5/2/2013	PH036	2.1	1	39001-02-0	OCDF	99.7		0.0246	10.2	ng/kg	B			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	1613B	5/2/2013	PH036	2.1	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.84	J										



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8270D SIM	4/30/2013	PH036	3.7	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8270D SIM	4/30/2013	PH036	3.7	1	91-20-3	NAPHTHALENE	0.93	J	0.69	1.7	ug/kg	J	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8270D SIM	4/30/2013	PH036	3.7	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	11097-69-1	Aroclor 1254	14	J	4.6	18	ug/kg	J	J	FD, Z	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	11126-42-4	Aroclor 5460	17	J	10	34	ug/kg	J	J	FD, Z	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	53469-21-9	Aroclor 1242	18	U	3.4	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	1024-57-3	HEPTACHLOR EPOXIDE	0.86	U	0.18	0.86	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	1031-07-8	ENDOSULFAN SULFATE	1.8	U	0.34	1.8	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	2385-85-5	MIREX	1.8	U	0.36	1.8	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	309-00-2	ALDRIN	0.86	U	0.18	0.86	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	319-84-6	ALPHA-BHC	0.86	U	0.18	0.86	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	319-85-7	BETA-BHC	2	U	1.0	2.0	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	319-86-8	DELTA-BHC	0.86	U	0.47	0.86	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	33213-65-9	ENDOSULFAN II	1.8	U	0.34	1.8	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	50-29-3	4,4'-DDT	0.72	J	0.36	1.8	ug/kg	J	J	FD, Z	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	53494-70-5	ENDRIN KETONE	1.9	U	0.62	1.9	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	57-74-9	CHLORDANE	18	U	4.2	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	58-89-9	gamma-BHC (Lindane)	0.86	U	0.18	0.86	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	60-57-1	DIELDRIN	1.8	U	0.34	1.8	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	72-20-8	ENDRIN	1.8	U	0.34	1.8	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	72-43-5	Methoxychlor	7	U	1.8	7.0	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	72-54-8	4,4'-DDD	1.8	U	0.34	1.8	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	72-55-9	4,4'-DDE	0.67	J	0.34	1.8	ug/kg	J	J	FD, Z	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	7421-93-4	ENDRIN ALDEHYDE	1.8	U	0.34	1.8	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	76-44-8	HEPTACHLOR	0.86	U	0.18	0.86	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	8001-35-2	Toxaphene	34	U	15	34	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8081B	4/27/2013	PH036	3.7	1	959-98-8	ENDOSULFAN I	0.86	U	0.23	0.86	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8015M	4/26/2013	PH036	3.7	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8015M	4/26/2013	PH036	3.7	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8015M	4/26/2013	PH036	3.7	1	PHCC21C30	EFH (C21-C30)	6.9	J	2.1	5.2	mg/kg		J	FD, Q	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8015M	4/26/2013	PH036	3.7	1	PHCC30C40	EFH (C30-C40)	21	J	4.2	10	mg/kg		J	FD, L	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8015M	4/26/2013	PH036	3.7	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	7471B	4/26/2013	PH036	3.7	1	7439-97-6	MERCURY	0.0167		0.0102	0.0164	mg/kg				1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	6020A	4/29/2013	PH036	3.7	2	7440-22-4	SILVER	0.0279	J	0.0206	0.206	mg/kg	J	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	6020A	4/29/2013	PH036	3.7	2	7440-24-6	STRONTIUM	13.2	J										



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	3268-87-9	OCDD	174		0.0461	10.2	ng/kg	B			1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	17.1		0.0579	5.08	ng/kg	B			1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	39001-02-0	OCDF	13.7	J	0.0491	10.2	ng/kg	B	J	FD	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.317	J	0.0540	5.08	ng/kg	JB	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.08	U	0.0444	5.08	ng/kg	JBQ	U	B	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.184	J	0.0703	1.02	ng/kg	JQ	J	FD, Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.298	J	0.0648	5.08	ng/kg	JBQ	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	57117-31-4	2,3,4,7,8-PCEDF	0.484	J	0.0363	5.08	ng/kg	JBQ	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.577	J	0.0385	5.08	ng/kg	JBQ	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.307	J	0.0383	5.08	ng/kg	JBQ	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.728	J	0.0562	5.08	ng/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.284	J	0.0403	5.08	ng/kg	JB	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	3.38	J	0.0395	5.08	ng/kg	JB	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.435	J	0.0413	5.08	ng/kg	JB	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.108	J	0.0383	5.08	ng/kg	JBQ	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	1613B	5/7/2013	PH039	4.3	1	TCDD TEQ	TCDD TEQ	0.503		0	0	ng/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7429-90-5	ALUMINIUM (FUME OR DUST)	12000		7.98	41.4	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7439-89-6	IRON	18500		3.93	41.4	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7439-92-1	LEAD	15.1	J	0.486	3.10	mg/kg		J	E, Q	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7439-93-2	LITHIUM	19.6		0.57	4.1	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7439-95-4	MAGNESIUM	4550		1.79	10.3	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7439-96-5	MANGANESE	328		0.0859	1.03	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7439-98-7	MOLYBDENUM	2.07	UJ	0.176	2.07	mg/kg	J	UJ	F, FD	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-02-0	NICKEL	10.1		0.114	2.07	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-09-7	POTASSIUM	3320	J	14.0	103	mg/kg		J	Q	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-23-5	SODIUM	103	U	17.3	103	mg/kg	J	U	F	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-31-5	TIN	10.3	UJ	0.228	10.3	mg/kg	J	UJ	B, FD	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-32-6	TITANIUM METAL POWDER	1040		0.176	1.03	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-36-0	ANTIMONY	0.542	J	0.517	4.14	mg/kg	J	J	FD, Q, Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-38-2	ARSENIC	4.09	J	0.341	4.14	mg/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-39-3	BARIUM	107		0.0341	1.03	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-41-7	BERYLLIUM	0.473	J	0.0693	1.03	mg/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-42-8	BORON	10.3	U	0.859	10.3	mg/kg		U	F	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-43-9	CADMIUM	0.38	J	0.0341	1.03	mg/kg	J	J	FD, Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-47-3	CHROMIUM	17		0.0910	3.10	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-48-4	COBALT	4.4	J	0.0931	1.03	mg/kg		J	FD, E	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-50-8	COPPER	12		0.186	2.07	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-62-2	VANADIUM (FUME OR DUST)	30.2		0.114	1.03	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C	5/3/2013	PH039	4.3	1	7440-66-6	ZINC	69.5		0.207	4.14	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	6010C																		



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.70	1.7	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	83-32-9	ACENAPHTHENE	1.7	U	0.70	1.7	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	84-66-2	DIETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	84-74-2	Di-n-butylphthalate	19	U	6.3	19	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	85-01-8	PHENANTHRENE	3.3		0.70	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	86-73-7	FLUORENE	3.5		0.70	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	90-12-0	1-METHYLNAPHTHALENE	1.1	J	0.70	1.7	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	91-20-3	NAPHTHALENE	2.1		0.70	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	8270D SIM	5/1/2013	PH039	4.3	1	91-57-6	2-METHYLNAPHTHALENE	1.8		0.70	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-819-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG	SL-519-SA7-SB-0.0-0.5	7036183	LL	9045M	4/26/2013	PH039	4.3	1	pH	PH	7.59		0.0100	0.0100	pH unit				1785697.708	268084.274	-118.70993	34.234591
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	160.3M	6/11/2013	PH045	4.1	1	MOIST	MOISTURE	4.1		0.10	0.10	%				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	1746-01-6	2,3,7,8-TCDD	1.02	U	0.0303	1.02	ng/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.11	U	0.0296	5.11	ng/kg	JBQ	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	3268-87-9	OCDD	17		0.0349	10.2	ng/kg	B			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	1.75	J	0.0429	5.11	ng/kg	JB	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	39001-02-0	OCDF	0.912	J	0.0448	10.2	ng/kg	JB	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.0574	J	0.0297	5.11	ng/kg	JQ	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.11	U	0.0457	5.11	ng/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.02	U	0.0467	1.02	ng/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.11	U	0.0379	5.11	ng/kg	JBQ	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	57117-31-4	2,3,4,7,8-PECDF	5.11	U	0.0233	5.11	ng/kg	JBQ	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.747	J	0.0244	5.11	ng/kg	JB	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.11	U	0.0244	5.11	ng/kg	JBQ	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8015M	6/12/2013	PH049	1.4	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8015M	6/12/2013	PH049	1.4	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8015M	6/12/2013	PH049	1.4	1	PHCC21C30	EFH (C21-C30)	5.1	U	2.0	5.1	mg/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8015M	6/12/2013	PH049	1.4	1	PHCC30C40	EFH (C30-C40)	10	U	4.1	10	mg/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8015M	6/12/2013	PH049	1.4	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	1024-57-3	HEPTACHLOR EPOXIDE	0.84	U	0.17	0.84	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	1031-07-8	ENDOSULFAN SULFATE	1.7	U	0.33	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	2385-85-5	MIREX	1.7	U	0.35	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	309-00-2	ALDRIN	0.84	U	0.17	0.84	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	319-84-6	ALPHA-BHC	0.84	U	0.17	0.84	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	319-85-7	BETA-BHC	1.9	UJ	0.97	1.9	ug/kg	U	UJ	L	1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	319-86-8	DELTA-BHC	0.84	U	0.46	0.84	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	33213-65-9	ENDOSULFAN II	1.7	U	0.33	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	50-29-3	4,4'-DDT	1.7	U	0.35	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	53494-70-5	ENDRIN KETONE	1.8	U	0.61	1.8	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	57-74-9	CHLORDANE	17	U	4.1	17	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	58-89-9	gamma-BHC (Lindane)	0.84	U	0.17	0.84	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8081B	6/15/2013	PH049	1.4	1	60-57-1	DIELDR												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8270D SIM	6/18/2013	PH049	1.4	1	84-66-2	DIETHYL PHTHALATE	18	U	6.0	18	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8270D SIM	6/18/2013	PH049	1.4	1	84-74-2	Di-n-butylphthalate	18	U	6.0	18	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8270D SIM	6/18/2013	PH049	1.4	1	85-01-8	PHENANTHRENE	1.7	U	0.67	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8270D SIM	6/18/2013	PH049	1.4	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.0	18	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8270D SIM	6/18/2013	PH049	1.4	1	86-73-7	FLUORENE	1.7	U	0.67	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8270D SIM	6/18/2013	PH049	1.4	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.67	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8270D SIM	6/18/2013	PH049	1.4	1	91-20-3	NAPHTHALENE	1.7	U	0.67	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	8270D SIM	6/18/2013	PH049	1.4	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.67	1.7	ug/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	9045M	6/7/2013	PH049	1.4	1	pH	PH	8.32		0.0100	0.0100	pH unit				1786004.881	268086.611	-118.70892	34.234604
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	160.3M	6/12/2013	PH046	1.8	1	MOIST	MOISTURE	1.8		0.10	0.10	%				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	1746-01-6	2,3,7,8-TCDD	0.11	J	0.0312	1.02	ng/kg	J	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	1.87	J	0.0401	5.09	ng/kg	JB	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	3268-87-9	OCDD	906	J	0.0441	10.2	ng/kg	B	J	FD	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	95.8	J	0.0514	5.09	ng/kg	B	J	FD	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	39001-02-0	OCDF	82.8	J	0.0356	10.2	ng/kg	B	J	FD	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.06	J	0.0415	5.09	ng/kg	JBQ	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.451	J	0.0588	5.09	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.763	J	0.0947	1.02	ng/kg	JB	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	1.28	J	0.0342	5.09	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	57117-31-4	2,3,4,7,8-PCDF	0.839	J	0.0439	5.09	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.702	J	0.0491	5.09	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.913	J	0.0376	5.09	ng/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	3.18	J	0.0445	5.09	ng/kg	J	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.894	J	0.0375	5.09	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	19.2	J	0.0315	5.09	ng/kg	B	J	FD	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.876	J	0.0378	5.09	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.09	U	0.0380	5.09	ng/kg	JB	U	B	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	1613B	6/19/2013	PH046	1.8	1	TCDD TEQ	TCDD TEQ	3.17		0	0	ng/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7429-90-5	ALUMINUM (FUME OR DUST)	9050		7.85	40.7	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7439-89-6	IRON	16400		3.87	40.7	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7439-92-1	LEAD	7.81		0.479	3.05	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7439-93-2	LITHIUM	22.2		0.56	4.1	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7439-95-4	MAGNESIUM	3550		1.76	10.2	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7439-96-5	MANGANESE	243		0.0845	1.02	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7439-98-7	MOLYBDENUM	2.04	UJ	0.173	2.04	mg/kg	J	UJ	F, FD, B	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7440-02-0	NICKEL	6.82		0.112	2.04	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7440-09-7	POTASSIUM	2980	J	13.7	102	mg/kg		J	Q	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7440-23-5	SODIUM	63.8	J	17.0	102	mg/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7440-31-5	TIN	10.2	U	0.224	10.2	mg/kg	J	U	B	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7440-32-6	TITANIUM METAL POWDER	945		0.173	1.02	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7440-36-0	ANTIMONY	0.573	J	0.509	4.07	mg/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	6010C	6/11/2013	PH046	1.8	1	7440-38-2	ARSENIC	4.18		0.336	4.07	mg/kg				1786064.318	268182.882	-118	



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	1613B	#####	PH121	5.5	1	TCDD TEQ	TCDD TEQ	0.0942		0	0	ng/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7429-90-5	ALUMINUM (FUME OR DUST)	10800		7.63	42.3	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7439-89-6	IRON	16400		3.83	42.3	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7439-92-1	LEAD	4.47		0.529	3.17	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7439-93-2	LITHIUM	17.6		0.36	4.2	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7439-95-4	MAGNESIUM	3720		1.77	10.6	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7439-96-5	MANGANESE	274		0.0878	1.06	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7439-98-7	MOLYBDENUM	2.12	U	0.180	2.12	mg/kg	J	U	F	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-02-0	NICKEL	7.67		0.138	2.12	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-09-7	POTASSIUM	2340	J	8.83	106	mg/kg		J	Q	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-23-5	SODIUM	114		17.7	106	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-31-5	TIN	10.6	U	0.233	10.6	mg/kg	J	U	B	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-32-6	TITANIUM METAL POWDER	735		0.180	1.06	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-36-0	ANTIMONY	4.23	UJ	0.783	4.23	mg/kg	U	UJ	Q	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-38-2	ARSENIC	2.05	J	0.741	4.23	mg/kg	J	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-39-3	BARIUM	81		0.0349	1.06	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-41-7	BERYLLIUM	0.402	J	0.0709	1.06	mg/kg	J	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-42-8	BORON	5.2	J	0.889	10.6	mg/kg	J	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-43-9	CADMIUM	0.21	J	0.0804	1.06	mg/kg	J	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-47-3	CHROMIUM	13.2		0.169	3.17	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-48-4	COBALT	5.9		0.105	1.06	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-50-8	COPPER	10.5		0.307	2.12	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-62-2	VANADIUM (FUME OR DUST)	26.4		0.138	1.06	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-66-6	ZINC	42.5		0.212	4.23	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-67-7	ZIRCONIUM	1.91	J	0.889	5.29	mg/kg	J	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7440-70-2	CALCIUM METAL	3350		3.53	21.2	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6010C	#####	PH121	5.5	1	7723-14-0	PHOSPHORUS	516	J	3.06	10.6	mg/kg		J	Q, E	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6020A	#####	PH121	5.5	5	7440-24-6	STRONTIUM	19.4	J	0.180	1.06	mg/kg		J	Q, E, A	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6020A	#####	PH121	5.5	2	7782-49-2	SELENIUM	0.572		0.106	0.423	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6020A	#####	PH121	5.5	2	7440-22-4	SILVER	0.212	U	0.0275	0.212	mg/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	6020A	#####	PH121	5.5	2	7440-28-0	THALLIUM	0.259		0.0317	0.212	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	7471B	#####	PH121	5.5	1	7439-97-6	MERCURY	0.0194		0.0099	0.0164	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8015M	10/9/2013	PH121	5.5	1	PHCC12C14	EFH (C12-C14)	5.3	U	2.1	5.3	mg/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8015M	10/9/2013	PH121	5.5	1	PHCC15C20	EFH (C15-C20)	5.3	U	2.1	5.3	mg/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8015M	10/9/2013	PH121	5.5	1	PHCC21C30	EFH (C21-C30)	4.5	J	2.1	5.3	mg/kg	J	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8015M	10/9/2013	PH121	5.5	1	PHCC30C40	EFH (C30-C40)	18		4.2	11	mg/kg				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8015M	10/9/2013	PH121	5.5	1	PHCC8C11	EFH (C8-C11)	5.3	U	2.1	5.3	mg/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8082A	10/8/2013	PH121	5.5	1	11096-82-5	Aroclor 1260	18	U	4.1	18	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8082A	10/8/2013	PH121	5.5	1	11097-69-1	Aroclor 1254	18	U	4.6	18	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8082A	10/8/2013	PH121	5.5	1	11100-14-4	Aroclor 1268	18	U	3.5	18	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8082A	10/8/2013	PH121	5.5	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8082A	10/8/2013	PH121	5.5	1	11126-42-4	Aroclor 5460	35	U	10	35	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8082A	10/8/2013	PH121	5.5	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	8082A	10/8/2013	PH121	5.5	1	12642-23-8	Aroclor 5442	35	U	10									



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	0.397	J	0.0685	5.12	ng/kg	JB		Z	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	39001-02-0	OCDF	10.2	U	0.0782	10.2	ng/kg	JBQ		B	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.12	U	0.0497	5.12	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.115	J	0.107	5.12	ng/kg	JQ		Z	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.02	U	0.106	1.02	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.12	U	0.0385	5.12	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	57117-31-4	2,3,4,7,8-PCDF	5.12	U	0.0610	5.12	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.12	U	0.0661	5.12	ng/kg	JBQ		B	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.12	U	0.0461	5.12	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.12	U	0.0527	5.12	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.12	U	0.0455	5.12	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.12	U	0.0267	5.12	ng/kg	JBQ		B	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.12	U	0.0489	5.12	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.0426	J	0.0326	5.12	ng/kg	JQ		Z	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	1613B	#####	PH121	3	1	TCDD TEQ	TCDD TEQ	0.00526		0	0	ng/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7429-90-5	ALUMINIUM (FUME OR DUST)	9070		7.43	41.2	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7439-89-6	IRON	15900		3.73	41.2	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7439-92-1	LEAD	3.39		0.515	3.09	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7439-93-2	LITHIUM	27.7		0.35	4.1	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7439-95-4	MAGNESIUM	4470		1.72	10.3	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7439-96-5	MANGANESE	228		0.0856	1.03	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7439-98-7	MOLYBDENUM	2.06	U	0.175	2.06	mg/kg	J		U	F	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-02-0	NICKEL	7.33		0.134	2.06	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-09-7	POTASSIUM	2580	J	8.60	103	mg/kg			O	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-23-5	SODIUM	111		17.2	103	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-31-5	TIN	10.3	U	0.227	10.3	mg/kg	J		B	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-32-6	TITANIUM METAL POWDER	833		0.175	1.03	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-36-0	ANTIMONY	4.12	UJ	0.763	4.12	mg/kg	U		UJ	O	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-38-2	ARSENIC	4.06	J	0.722	4.12	mg/kg	J		Z	1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-39-3	BARIUM	62.5		0.0340	1.03	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-41-7	BERYLLIUM	0.415	J	0.0691	1.03	mg/kg	J		J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-42-8	BORON	6.34	J	0.866	10.3	mg/kg	J		J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-43-9	CADMIUM	0.219	J	0.0784	1.03	mg/kg	J		J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-47-3	CHROMIUM	14.7		0.165	3.09	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	6010C	#####	PH121	3	1	7440-48-4	COBALT	3.95		0.102	1.03	mg/kg				1785078.501	267681.635	-118.71197	34.233473	
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-50-8	COPPER	9.98		0.186	2.06	mg/kg				1784525.385	267430.268	-118.7138	34.232772	
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-62-2	VANADIUM (FUME OR DUST)	39.6		0.114	1.03	mg/kg				1784525.385	267430.268	-118.7138	34.232772	
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-66-6	ZINC	66.1		0.206	4.13	mg/kg				1784525.385	267430.268	-118.7138	34.232772	
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-67-7	ZIRCONIUM	0.971	J	0.857	5.16	mg/kg	J		J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7440-70-2	CALCIUM METAL	3670		4.15	20.6	mg/kg				1784525.385	267430.268	-118.7138	34.232772	
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6010C	4/21/2013	PH032	5	1	7723-14-0	PHOSPHORUS	419	J	0.526	10.3	mg/kg			J	O	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6020A	4/21/2013	PH032	5	2	7782-49-2	SELENIUM	0.413	U	0.103	0.413	mg/kg	U			1784525.385	267430.268	-118.7138	34.232772	
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6020A	4/21/2013	PH032	5	2	7440-22-4	SILVER	0.0303	J	0.0206	0.206	mg/kg	J		J	Z	1784525.385	267430.268	-118.7138	34.232772
SL-560-SA7-SB-0.0-0.5	4/16/2013	N	0	0.5	ft	SO	7_DG		7024686	LL	6020A																			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.135	J	0.0284	4.97	ng/kg	JQ	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.249	J	0.0395	0.994	ng/kg	JQ	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.396	J	0.0369	4.97	ng/kg	JB	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	57117-31-4	2,3,4,7,8-PECDF	0.375	J	0.0194	4.97	ng/kg	JB	J	FD, Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.591	J	0.0200	4.97	ng/kg	JB	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.267	J	0.0249	4.97	ng/kg	JB	J	FD, Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.79	J	0.0407	4.97	ng/kg	J	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.315	J	0.0270	4.97	ng/kg	JB	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	4.4	J	0.0240	4.97	ng/kg	JB	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.435	J	0.0270	4.97	ng/kg	JB	J	FD, Z	1785804.977	268200.546	-118.70958	34.234913
SL-510-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031213	LL	8082A	4/27/2013	PH036	3.7	1	11096-82-5	Aroclor 1260	18	U	4.0	18	ug/kg	U			1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.111	J	0.0300	4.97	ng/kg	JB	J	Z	1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	1613B	5/1/2013	PH036	3	1	TCDD TEO	TCDD TEO	0.71		0	0	ng/kg				1785804.977	268200.546	-118.70958	34.234913
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO	7_DG	SL-510-SA7-SB-0.0-0.5	7031217	LL	160.3M	4/25/2013	PH036	3	1	MOIST	MOISTURE	3		0.10	0.10	%				1785804.977	268200.546	-118.70958	34.234913
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	9045M	4/23/2013	PH036	2.1	1	pH	PH	7.67		0.0100	0.0100	pH unit				1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	117-81-7	BIS(2-(ETHYLHEXYL)PHTHALATE	150	J	61	180	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	117-84-0	Di-n-octylphthalate	180	U	61	180	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	120-12-7	ANTHRACENE	17	U	3.4	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	129-00-0	PYRENE	10	J	6.8	17	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	131-11-3	DIMETHYL PHTHALATE	180	U	61	180	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	191-24-2	BENZO(G,H,I)PERYLENE	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	192-97-2	Benzo(e)pyrene	170	U	34	170	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	193-39-5	INDENO(1,2,3-CD)PYRENE	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	205-99-2	BENZO(B)FLUORANTHENE	14	J	6.8	17	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	206-44-0	FLUORANTHENE	11	J	6.8	17	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	207-08-9	BENZO(K)FLUORANTHENE	8.6	J	6.8	17	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	208-96-8	ACENAPHTHYLENE	17	U	3.4	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	218-01-9	Chrysene	9.1	J	3.4	17	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	50-32-8	BENZO(A)PYRENE	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	53-70-3	DIBENZO(A,H)ANTHRACENE	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	56-55-3	BENZO(A)ANTHRACENE	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	83-32-9	ACENAPHTHENE	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	84-66-2	DIETHYL PHTHALATE	180	U	61	180	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	84-74-2	Di-n-butylphthalate	180	U	61	180	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	85-01-8	PHENANTHRENE	14	J	6.8	17	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	85-68-7	BENZYL BUTYL PHTHALATE	180	U	61	180	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	86-73-7	FLUORENE	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	90-12-0	1-METHYLNAPHTHALENE	17	U	6.8	17	ug/kg	U			1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	91-20-3	NAPHTHALENE	8.6	J	6.8	17	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	8270D SIM	4/30/2013	PH036	2.1	10	91-57-6	2-METHYLNAPHTHALENE	13	J	6.8	17	ug/kg	J	J	Z	1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG																						



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	6010C	4/28/2013	PH036	2.1	1	7440-47-3	CHROMIUM	30.2		0.0890	3.03	mg/kg				1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	6010C	4/28/2013	PH036	2.1	1	7440-48-4	COBALT	5.57		0.0910	1.01	mg/kg				1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	6010C	4/28/2013	PH036	2.1	1	7440-50-8	COPPER	15.1		0.182	2.02	mg/kg				1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	6010C	4/28/2013	PH036	2.1	1	7440-62-2	VANADIUM (FUME OR DUST)	36.9		0.111	1.01	mg/kg				1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	6010C	4/28/2013	PH036	2.1	1	7440-66-6	ZINC	94.5		0.202	4.05	mg/kg				1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	6010C	4/28/2013	PH036	2.1	1	7440-67-7	ZIRCONIUM	12.5		0.839	5.06	mg/kg				1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	6010C	4/28/2013	PH036	2.1	1	7440-70-2	CALCIUM METAL	4080		4.07	20.2	mg/kg				1785851.788	268070.856	-118.70942	34.234558
SL-517-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031222	LL	6010C	4/28/2013	PH036	2.1	1	7723-14-0	PHOSPHORUS	460		0.516	10.1	mg/kg				1785851.788	268070.856	-118.70942	34.234558
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	63496-31-1	Aroclor 5432	33	UJ	10	33	ug/kg	U	UJ	E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	21		6.1	18	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	120-12-7	ANTHRACENE	0.52	J	0.34	1.7	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	129-00-0	PYRENE	7.9	J	0.68	1.7	ug/kg		J	Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	191-24-2	BENZO(G,H,I)PERYLENE	2.8	J	0.68	1.7	ug/kg		J	FD, Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	192-97-2	Benzo(e)pyrene	5.5	J	3.4	17	ug/kg	J	J	FD, Q, Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	193-39-5	INDENO(1,2,3-CD)PYRENE	2.5	J	0.68	1.7	ug/kg		J	FD, Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	205-99-2	BENZO(B)FLUORANTHENE	13	J	0.68	1.7	ug/kg		J	FD, Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	206-44-0	FLUORANTHENE	9.1	J	0.68	1.7	ug/kg		J	Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	207-08-9	BENZO(K)FLUORANTHENE	9.1	J	0.68	1.7	ug/kg		J	FD	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	208-96-8	ACENAPHTHYLENE	0.39	J	0.34	1.7	ug/kg	J	J	FD, Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	218-01-9	Chrysene	9	J	0.34	1.7	ug/kg		J	FD, Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	50-32-8	BENZO(A)PYRENE	5	J	0.68	1.7	ug/kg		J	FD, Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1	J	0.68	1.7	ug/kg	J	J	FD, Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	56-55-3	BENZO(A)ANTHRACENE	4.5	J	0.68	1.7	ug/kg		J	Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.68	1.7	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	83-32-9	ACENAPHTHENE	1.7	U	0.68	1.7	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	84-66-2	DIEETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	84-74-2	Di-n-butylphthalate	18	U	6.1	18	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	85-01-8	PHENANTHRENE	3.1		0.68	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	86-73-7	FLUORENE	3.9		0.68	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	90-12-0	1-METHYLNAPHTHALENE	0.88	J	0.68	1.7	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	91-20-3	NAPHTHALENE	1.5	J	0.68	1.7	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8270D SIM	5/1/2013	PH039	2.4	1	91-57-6	2-METHYLNAPHTHALENE	1.5	J	0.68	1.7	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	9045M	4/26/2013	PH039	2.4	1	pH	pH	7.32		0.0100	0.0100	pH unit				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	160.3M	5/1/2013	PH039	3.4	1	MOIST	MOISTURE	3.4		0.10	0.10	%				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	1613B	5/9/2013	PH039	3.4	1	1746-01-6	2,3,7,8-TCDD	1.01	U	0.0216	1.01	ng/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	1613B	5/9/2013	PH039	3.4	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.183	J	0.0253	5.06	ng/kg	JB	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	1613B	5/9/2013	PH039	3.4	1	3268-87-9	OCDD	35.1		0.0213	10.1	ng/kg	B			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	1613B	5/9/2013	PH039	3.4	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	4.07	J	0.0229	5.06	ng/kg	JB	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	1613B	5/9/2013	PH039	3.4	1	39001-02-0	OCDF	1.54	J	0.0270	10.1	ng/kg	JB	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	1613B	5/9/2013	PH039	3.4	1	39227-28-6	1,2,3,4,												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	6010C	5/3/2013	PH039	3.4	1	7723-14-0	PHOSPHORUS	408	J	0.518	10.1	mg/kg		J	E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	6020A	5/6/2013	PH039	3.4	2	7782-49-2	SELENIUM	0.154	J	0.101	0.406	mg/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	6020A	5/6/2013	PH039	3.4	2	7440-22-4	SILVER	0.0224	J	0.0203	0.203	mg/kg	J		Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	6020A	5/6/2013	PH039	3.4	2	7440-24-6	STRONTIUM	23.1		0.0345	0.406	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	6020A	5/6/2013	PH039	3.4	2	7440-28-0	THALLIUM	0.315		0.0304	0.203	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	7471B	5/3/2013	PH039	3.4	1	7439-97-6	MERCURY	0.0254		0.0099	0.0165	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8015M	5/2/2013	PH039	3.4	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8015M	5/2/2013	PH039	3.4	1	PHCC15C20	EFH (C15-C20)	9.2		2.1	5.2	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8015M	5/2/2013	PH039	3.4	1	PHCC21C30	EFH (C21-C30)	40		2.1	5.2	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8015M	5/2/2013	PH039	3.4	1	PHCC30C40	EFH (C30-C40)	51	J	4.1	10	mg/kg		J	L	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8015M	5/2/2013	PH039	3.4	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8015M	4/30/2013	PH039	3.4	29.98	GROC5C12	GASOLINE RANGE ORGANICS (C5-C12)	1.4		0.2	1.2	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	11126-42-4	Aroclor 5460	34	UJ	10	34	ug/kg	U	UJ	E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	12642-23-8	Aroclor 5442	34	UJ	10	34	ug/kg	U	UJ	E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8082A	5/3/2013	PH039	3.4	1	63496-31-1	Aroclor 5432	34	UJ	10	34	ug/kg	U	UJ	E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.2	19	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	120-12-7	ANTHRACENE	0.68	J	0.35	1.7	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	129-00-0	PYRENE	9.1		0.69	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	191-24-2	BENZO(G,H,I)PERYLENE	1.8		0.69	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	192-97-2	Benzo(e)pyrene	4.1	J	3.4	18	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	193-39-5	INDENO(1,2,3-CD)PYRENE	2		0.69	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	205-99-2	BENZO(B)FLUORANTHENE	9.4		0.69	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	206-44-0	FLUORANTHENE	9.4		0.69	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	207-08-9	BENZO(K)FLUORANTHENE	3.9		0.69	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	218-01-9	Chrysene	7.9		0.35	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	50-32-8	BENZO(A)PYRENE	5.4		0.69	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	56-55-3	BENZO(A)ANTHRACENE	5.9		0.69	1.7	ug/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3.0	4/25/2013	N	2	3	ft	SO	7_DG		7036184	LL	8270D SIM	5/1/2013	PH039	3.4	1	84-66-2	DIETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-2.0-3																													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	6020A	6/11/2013	PH049	1.1	2	7440-24-6	STRONTIUM	15.7	J	0.0344	0.404	mg/kg		J	E	1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	6020A	6/11/2013	PH049	1.1	2	7440-28-0	THALLIUM	0.217		0.0303	0.202	mg/kg				1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	7471B	6/11/2013	PH049	1.1	1	7439-97-6	MERCURY	0.0264		0.0095	0.0158	mg/kg				1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8015M	6/12/2013	PH049	1.1	2	PHCC12C14	EFH (C12-C14)	10	U	4.0	10	mg/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8015M	6/12/2013	PH049	1.1	2	PHCC15C20	EFH (C15-C20)	10	U	4.0	10	mg/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8015M	6/12/2013	PH049	1.1	2	PHCC21C30	EFH (C21-C30)	46		4.0	10	mg/kg				1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8015M	6/12/2013	PH049	1.1	2	PHCC30C40	EFH (C30-C40)	100		8.1	20	mg/kg				1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8015M	6/12/2013	PH049	1.1	2	PHCC8C11	EFH (C8-C11)	10	U	4.0	10	mg/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	11097-69-1	Aroclor 1254	52		4.4	17	ug/kg				1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	11126-42-4	Aroclor 5460	180		10	33	ug/kg				1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	53469-21-9	Aroclor 1242	17	U	4.1	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8082A	6/12/2013	PH049	1.1	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	180	U	60	180	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	117-84-0	Di-n-octylphthalate	180	U	60	180	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	120-12-7	ANTHRACENE	17	U	3.3	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	129-00-0	PYRENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	131-11-3	DIMETHYL PHTHALATE	180	U	60	180	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	191-24-2	BENZO(G,H,I)PERYLENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	192-97-2	Benzo(e)pyrene	170	U	33	170	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	193-39-5	INDENO(1,2,3-CD)PYRENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	205-99-2	BENZO(B)FLUORANTHENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	206-44-0	FLUORANTHENE	6.8	J	6.7	17	ug/kg	J	J	Z	1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	207-08-9	BENZO(K)FLUORANTHENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	208-96-8	ACENAPHTHYLENE	17	U	3.3	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	218-01-9	Chrysene	5.1	J	3.3	17	ug/kg	J	J	Z	1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	50-32-8	BENZO(A)PYRENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	53-70-3	DIBENZO(A,H)ANTHRACENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	56-55-3	BENZO(A)ANTHRACENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	83-32-9	ACENAPHTHENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	84-66-2	DIETHYL PHTHALATE	180	U	60	180	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	84-74-2	Di-n-butylphthalate	180	U	60	180	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	85-01-8	PHENANTHRENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	85-68-7	BENZYL BUTYL PHTHALATE	180	U	60	180	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085553	LL	8270D SIM	6/18/2013	PH049	1.1	10	86-73-7	FLUORENE	17	U	6.7	17	ug/kg	U			1786032.069	268139.55	-118.70883	34.23475
SL-514-SA7-SB-0.0-0.5	6/6/2013	N																											



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-38-2	ARSENIC	4.87		0.325	3.94	mg/kg				1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-39-3	BARIUM	66.9		0.0325	0.985	mg/kg				1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-41-7	BERYLLIUM	0.439	J	0.0660	0.985	mg/kg	J	J		1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-42-8	BORON	1.67	J	0.817	9.85	mg/kg	J	J	Z	1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-43-9	CADMIUM	0.404	J	0.0325	0.985	mg/kg	J	J	Z	1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-47-3	CHROMIUM	16.1		0.0866	2.95	mg/kg				1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-48-4	COBALT	4.94		0.0886	0.985	mg/kg				1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-62-2	VANADIUM (FUME OR DUST)	33.9		0.108	0.985	mg/kg				1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-66-6	ZINC	54.1		0.197	3.94	mg/kg				1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-67-7	ZIRCONIUM	4.92	U	0.817	4.92	mg/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7440-70-2	CALCIUM METAL	12000	J	3.96	19.7	mg/kg		J	E	1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6010C	6/12/2013	PH049	1.4	1	7723-14-0	PHOSPHORUS	438	J	0.502	9.85	mg/kg		J	Q	1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6020A	6/11/2013	PH049	1.4	2	7782-49-2	SELENIUM	0.105	J	0.0985	0.394	mg/kg	J	J	Z	1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6020A	6/11/2013	PH049	1.4	2	7440-22-4	SILVER	0.197	U	0.0197	0.197	mg/kg	U			1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6020A	6/11/2013	PH049	1.4	2	7440-24-6	STRONTIUM	17.2	J	0.0335	0.394	mg/kg		J	E	1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	6020A	6/11/2013	PH049	1.4	2	7440-28-0	THALLIUM	0.237		0.0295	0.197	mg/kg				1786004.881	268086.611	-118.70892	34.234604
SL-515-SA7-SB-0.0-0.5	6/6/2013	N	0	0.5	ft	SO	7_DG		7085554	LL	7471B	6/11/2013	PH049	1.4	1	7439-97-6	MERCURY	0.0112	J	0.0101	0.0168	mg/kg	J	J	Z	1786004.881	268086.611	-118.70892	34.234604
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	91-57-6	2-METHYLNAPHTHALENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	9045M	6/5/2013	PH046	1.5	1		pH	6.72		0.0100	0.0100	pH unit				1786064.318	268182.882	-118.70872	34.234869
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	160.3M	6/11/2013	PH046	7.7	1		MOIST	7.7		0.10	0.10	%				1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	1746-01-6	1,2,3,7,8-TCDD	1.07	UJ	0.0181	1.07	ng/kg	U	UJ	FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.37	U	0.0163	5.37	ng/kg	JBQ	U	B	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	3268-87-9	OCDD	2.71	J	0.0223	10.7	ng/kg	JB	J	FD, Z	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	5.37	UJ	0.0184	5.37	ng/kg	JB	UJ	B, FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	39001-02-0	OCDF	10.7	UJ	0.0215	10.7	ng/kg	JB	UJ	B, FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.37	UJ	0.0166	5.37	ng/kg	JBQ	UJ	B, FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.37	U	0.0207	5.37	ng/kg	JB	U	B	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0139	J	0.0124	1.07	ng/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.37	UJ	0.0105	5.37	ng/kq	JBQ	UJ	B, FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	57117-31-4	2,3,4,7,8-PECDF	5.37	U	0.00910	5.37	ng/kg	JB	U	B	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.37	UJ	0.00986	5.37	ng/kg	JBQ	UJ	B, FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.37	UJ	0.00823	5.37	ng/kg	JBQ	UJ	B, FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.37	UJ	0.0179	5.37	ng/kg	JB	UJ	B, FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.37	U	0.00791	5.37	ng/kq	JB	U	B	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.37	UJ	0.00813	5.37	ng/kg	JB	UJ	B, FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.37	U	0.00856	5.37	ng/kg	JBQ	U	B	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.37	U	0.00888	5.37	ng/kg	JBQ	U	B	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	1613B	6/15/2013	PH046	7.7	1		TCDD TEQ	0.0816		0	0	ng/kg				1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	6010C	6/12/2013	PH046	7.7	1	7429-90-5	ALUMINUM (FUME OR DUST)	13300		8.19	42.5	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	6010C	6/12/2013	PH046	7.7	1	7439-89-6	IRON	21500	J	4.04	42.5	mg/kg		J	A	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	6010C	6/12/2013	PH046	7.7</															



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8082A	6/12/2013	PH046	7.7	1	11141-16-5	Aroclor 1232	18	U	4.4	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8082A	6/12/2013	PH046	7.7	1	12642-23-8	Aroclor 5442	36	U	11	36	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8082A	6/12/2013	PH046	7.7	1	12672-29-6	Aroclor 1248	18	U	3.6	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8082A	6/12/2013	PH046	7.7	1	12674-11-2	Aroclor 1016	18	U	3.6	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8082A	6/12/2013	PH046	7.7	1	37324-23-5	Aroclor 1262	18	U	3.6	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8082A	6/12/2013	PH046	7.7	1	53469-21-9	Aroclor 1242	18	U	4.4	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8082A	6/12/2013	PH046	7.7	1	63496-31-1	Aroclor 5432	36	U	11	36	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	20	U	6.5	20	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	117-84-0	Di-n-octylphthalate	20	U	6.5	20	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	120-12-7	ANTHRACENE	1.8	U	0.36	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	129-00-0	PYRENE	4.6	J	0.72	1.8	ug/kg		J	FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	131-11-3	DIMETHYL PHTHALATE	20	U	6.5	20	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	191-24-2	BENZO(G,H,I)PERYLENE	1	J	0.72	1.8	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	192-97-2	Benzo(e)pyrene	8	J	3.6	18	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	205-99-2	BENZO(B)FLUORANTHENE	3.7		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	206-44-0	FLUORANTHENE	1.1	J	0.72	1.8	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	207-08-9	BENZO(K)FLUORANTHENE	1.8	J	0.72	1.8	ug/kg	J	J	FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	208-96-8	ACENAPHTHYLENE	1.8	U	0.36	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	218-01-9	Chrysene	8.6		0.36	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	50-32-8	BENZO(A)PYRENE	1.7	J	0.72	1.8	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.8	UJ	0.72	1.8	ug/kg	U	UJ	FD	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	56-55-3	BENZO(A)ANTHRACENE	1.3	J	0.72	1.8	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	83-32-9	ACENAPHTHENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	84-66-2	DIETHYL PHTHALATE	20	U	6.5	20	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	84-74-2	Di-n-butylphthalate	20	U	6.5	20	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	85-01-8	PHENANTHRENE	3.7		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	85-68-7	BENZYL BUTYL PHTHALATE	20	U	6.5	20	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	86-73-7	FLUORENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	90-12-0	1-METHYLNAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	91-20-3	NAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	8270D SIM	6/13/2013	PH046	7.7	1	91-57-6	2-METHYLNAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-924-SA7-SB-1.0-2.0	6/4/2013	FD	1	2	ft	SO	7_DG	SL-524-SA7-SB-1.0-2.0	7081069	LL	9045M	6/5/2013	PH046	7.7	1	pH	PH	8.3		0.0100	0.0100	pH unit				1785674.345	267781.79	-118.71	34.23376
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	160.3M	#####	PH121	5.5	1	MOIST	MOISTURE	5.5		0.10	0.10	%				1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	1613B	#####	PH121	5.5	1	1746-01-6	2,3,7,8-TCDD	1.06	U	0.148	1.06	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	1613B	#####	PH121	5.5	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.121	J	0.0790	5.29	ng/kg	JQ	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	1613B	#####	PH121	5.5	1	3268-87-9	OCDD	56.2		0.0731	10.6	ng/kg	B			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	1613B	#####	PH121	5.5	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	5.48		0.132	5.29	ng/kg	B			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	1613B	#####	PH121	5.5	1	39001-02-0	OCDF	1.3	J	0.0871	10.6	ng/kg	JBQ	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-0.0-0.5	10/2/2013	N	0	0.5	ft	SO	7_DG		7222778	LL	1613B	#####	PH121	5.5	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.29	U	0.0751	5.29	ng/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-810-SA7-SB-0.0-0.5	4/22/2013	FD	0	0.5	ft	SO																							



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-66-6	ZINC	90.6		0.203	4.06	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-67-7	ZIRCONIUM	2.53	J	0.842	5.07	mg/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-70-2	CALCIUM METAL	4410	J	4.08	20.3	mg/kg		J	E	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7723-14-0	PHOSPHORUS	422	J	0.518	10.1	mg/kg		J	E	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6020A	5/6/2013	PH039	3.4	2	7782-49-2	SELENIUM	0.209	J	0.101	0.406	mg/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6020A	5/6/2013	PH039	3.4	2	7440-22-4	SILVER	0.0409	J	0.0203	0.203	mg/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6020A	5/6/2013	PH039	3.4	2	7440-24-6	STRONTIUM	23.5		0.0345	0.406	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6020A	5/6/2013	PH039	3.4	2	7440-28-0	THALLIUM	0.269		0.0304	0.203	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	7471B	5/3/2013	PH039	3.4	1	7439-97-6	MERCURY	0.09		0.0099	0.0164	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8015M	5/2/2013	PH039	3.4	5	PHCC12C14	EFH (C12-C14)	26	U	10	26	mg/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8015M	5/2/2013	PH039	3.4	5	PHCC15C20	EFH (C15-C20)	26	U	10	26	mg/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8015M	5/2/2013	PH039	3.4	5	PHCC21C30	EFH (C21-C30)	52		10	26	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8015M	5/2/2013	PH039	3.4	5	PHCC30C40	EFH (C30-C40)	140	J	21	52	mg/kg		J	L	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8015M	5/2/2013	PH039	3.4	5	PHCC8C11	EFH (C8-C11)	26	U	10	26	mg/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	11097-69-1	Aroclor 1254	100		4.5	17	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	11126-42-4	Aroclor 5460	57	J	10	34	ug/kg		J	E	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	12642-23-8	Aroclor 5442	34	UJ	10	34	ug/kg	U	UJ	E	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	53469-21-9	Aroclor 1242	17	U	3.4	17	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8082A	5/3/2013	PH039	3.4	1	63496-31-1	Aroclor 5432	34	UJ	10	34	ug/kg	U	UJ	E	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/2/2013	PH039	3.4	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	610		62	190	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	120-12-7	ANTHRACENE	0.6	J	0.35	1.7	ug/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	129-00-0	PYRENE	4.2		0.69	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	191-24-2	BENZO(G,H,I)PERYLENE	2.3		0.69	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	192-97-2	Benzo(e)pyrene	4.5	J	3.4	18	ug/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.8		0.69	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	205-99-2	BENZO(B)FLUORANTHENE	6.3		0.69	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	206-44-0	FLUORANTHENE	5.4		0.69	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	207-08-9	BENZO(K)FLUORANTHENE	2		0.69	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	208-96-8	ACENAPHTHYLENE	0.46	J	0.35	1.7	ug/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	218-01-9	Chrysene	4.7		0.35	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	50-32-8	BENZO(A)PYRENE	2.9		0.69	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.1	J	0.69	1.7	ug/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	56-55-3	BENZO(A)ANTHRACENE	2.5		0.69	1.7	ug/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	8270D SIM	5/1/2013	PH039	3.4	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N</																											



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7439-98-7	MOLYBDENUM	2.79	J	0.172	2.03	mg/kg			FD	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-02-0	NICKEL	8.9	J	0.112	2.03	mg/kg		J	A	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-09-7	POTASSIUM	3090	J	13.7	101	mg/kg		J	Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-23-5	SODIUM	101	U	16.9	101	mg/kg	J	U	F	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-31-5	TIN	10.9	J	0.223	10.1	mg/kg		J	FD	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-32-6	TITANIUM METAL POWDER	977		0.172	1.01	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-36-0	ANTIMONY	4.63	J	0.507	4.06	mg/kg		J	FD, Q	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-39-3	BARIUM	104		0.0335	1.01	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-41-7	BERYLLIUM	0.463	J	0.0680	1.01	mg/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-42-8	BORON	10.1	U	0.842	10.1	mg/kg		U	F	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-43-9	CADMIUM	1.19	J	0.0335	1.01	mg/kg		J	FD	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-47-3	CHROMIUM	15.4		0.0893	3.04	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-48-4	COBALT	7.61	J	0.0913	1.01	mg/kg		J	FD, E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-50-8	COPPER	12.3		0.183	2.03	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-62-2	VANADIUM (FUME OR DUST)	29.3		0.112	1.01	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-66-6	ZINC	71		0.203	4.06	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-67-7	ZIRCONIUM	2.49	J	0.842	5.07	mg/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7440-70-2	CALCIUM METAL	7940	J	4.08	20.3	mg/kg		J	E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6010C	5/3/2013	PH039	2.4	1	7723-14-0	PHOSPHORUS	679	J	0.517	10.1	mg/kg		J	E, A	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6020A	5/6/2013	PH039	2.4	2	7782-49-2	SELENIUM	0.189	J	0.101	0.406	mg/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6020A	5/6/2013	PH039	2.4	2	7440-22-4	SILVER	0.0351	J	0.0203	0.203	mg/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6020A	5/6/2013	PH039	2.4	2	7440-24-6	STRONTIUM	37.5		0.0345	0.406	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	6020A	5/6/2013	PH039	2.4	2	7440-28-0	THALLIUM	0.23		0.0304	0.203	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	7471B	5/3/2013	PH039	2.4	1	7439-97-6	MERCURY	0.0581		0.0100	0.0167	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8015M	5/2/2013	PH039	2.4	1	PHCC12C14	EFH (C12-C14)	2.5	J	2.0	5.1	mg/kg	J	J	FD, Q, Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8015M	5/2/2013	PH039	2.4	1	PHCC15C20	EFH (C15-C20)	14		2.0	5.1	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8015M	5/2/2013	PH039	2.4	1	PHCC21C30	EFH (C21-C30)	41		2.0	5.1	mg/kg				1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8015M	5/2/2013	PH039	2.4	1	PHCC30C40	EFH (C30-C40)	95	J	4.1	10	mg/kg		J	L	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8015M	5/2/2013	PH039	2.4	1	PHCC8C11	EFH (C8-C11)	3	J	2.0	5.1	mg/kg	J	J	FD, Q, Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	11097-69-1	Aroclor 1254	7	J	4.4	17	ug/kg	J	J	Z	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	11126-42-4	Aroclor 5460	33	UJ	10	33	ug/kg	U	UJ	E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	12642-23-8	Aroclor 5442	33	UJ	10	33	ug/kg	U	UJ	E	1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-519-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036179	LL	8082A	5/3/2013	PH039	2.4	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1785697.708	268084.274	-118.70993	34.234591
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	1613B	6/12/2013	PH045	3.7	1	1746-01-6	2,3,7,8-TCDD	1.03	U	0.0385	1.03	ng/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	1613B	6/12/2013	PH045	3.7	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.16	U	0.0221	5.16	ng/kg	JBQ	U	B	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	1613B	6/12/2013	PH045	3.7	1	3268-87-9	OCDD	1.4	J	0.0313	10.3	ng/kg	JB	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	1613B	6/12/2013	PH045	3.7	1	35822-46-9	1,2,3,4,6,												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	6010C	6/11/2013	PH045	3.7	1	7440-67-7	ZIRCONIUM	2.07	J	0.845	5.09	mg/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	6010C	6/11/2013	PH045	3.7	1	7440-70-2	CALCIUM METAL	2650		4.09	20.4	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	6010C	6/11/2013	PH045	3.7	1	7723-14-0	PHOSPHORUS	385		0.519	10.2	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	6020A	6/11/2013	PH045	3.7	2	7440-22-4	SILVER	0.204	U	0.0204	0.204	mg/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	6020A	6/11/2013	PH045	3.7	2	7440-24-6	STRONTIUM	11.7		0.0346	0.407	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	6020A	6/11/2013	PH045	3.7	2	7440-28-0	THALLIUM	0.249		0.0305	0.204	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	6020A	6/11/2013	PH045	3.7	2	7782-49-2	SELENIUM	0.414		0.102	0.407	mg/kg				1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	7471B	6/11/2013	PH045	3.7	1	7439-97-6	MERCURY	0.0168	U	0.0101	0.0168	mg/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8015M	6/10/2013	PH045	3.7	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8015M	6/10/2013	PH045	3.7	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8015M	6/10/2013	PH045	3.7	1	PHCC21C30	EFH (C21-C30)	2.6	J	2.1	5.2	mg/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8015M	6/10/2013	PH045	3.7	1	PHCC30C40	EFH (C30-C40)	5.6	J	4.2	10	mg/kg	J	J	Z	1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8015M	6/10/2013	PH045	3.7	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8015M	6/9/2013	PH045	3.7	26.71	GROC5C12	GASOLINE RANGE ORGANICS (C5-C12)	1.1	U	0.2	1.1	mg/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	12674-11-2	Aroclor 1016	17	U	3.4	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	53469-21-9	Aroclor 1242	17	U	4.2	17	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8082A	6/10/2013	PH045	3.7	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.2	19	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	117-84-0	Di-n-octylphthalate	19	U	6.2	19	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	120-12-7	ANTHRACENE	1.7	U	0.35	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	129-00-0	PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	205-99-2	BENZO(B)FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	206-44-0	FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	218-01-9	Chrysene	1.7	U	0.35	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785230.391	268010.77	-118.71148	34.23438
SL-533-SA7-SB-2.5-3.5	6/3/2013	N	2.5	3.5	ft	SO	7_DG		7079477	LL	8270D SIM	6/11/2013	PH045	3.7	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U										



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	39001-02-0	OCDF	28.3	J	0.0302	9.92	ng/kg	B	J	FD	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.527	J	0.0443	4.96	ng/kg	JB	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	4.96	U	0.0482	4.96	ng/kg	JBQ	U	B	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.457	J	0.0692	0.992	ng/kg	JB	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.775	J	0.0357	4.96	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	57117-31-4	2,3,4,7,8-PECDF	0.691	J	0.0384	4.96	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.646	J	0.0435	4.96	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.706	J	0.0330	4.96	ng/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	1.49	J	0.0483	4.96	ng/kg	J	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.624	J	0.0318	4.96	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	8.72	J	0.0317	4.96	ng/kg	B	J	FD	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.864	J	0.0332	4.96	ng/kg	JB	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	72918-21-9	1,2,3,7,8,9-HXCDF	4.96	U	0.0351	4.96	ng/kg	JB	U	B	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	1613B	6/19/2013	PH046	1.5	1	TCDD TEQ	TCDD TEQ	1.49		0	0	ng/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7429-90-5	ALUMINIUM (FUME OR DUST)	9640		7.75	40.2	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7439-89-6	IRON	16700		3.82	40.2	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7439-92-1	LEAD	9.75		0.472	3.02	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7439-93-2	LITHIUM	22.4		0.55	4.0	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7439-95-4	MAGNESIUM	3720		1.74	10.1	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7439-96-5	MANGANESE	255		0.0834	1.01	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7439-98-7	MOLYBDENUM	2.01	UJ	0.171	2.01	mg/kg	J	UJ	F, FD, B	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-02-0	NICKEL	7.63		0.111	2.01	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-09-7	POTASSIUM	3160	J	13.6	101	mg/kg		J	Q	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-23-5	SODIUM	63.2	J	16.8	101	mg/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-31-5	TIN	10.1	U	0.221	10.1	mg/kg	J	U	B	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-32-6	TITANIUM METAL POWDER	1030		0.171	1.01	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-36-0	ANTIMONY	0.637	J	0.503	4.02	mg/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-38-2	ARSENIC	4.31		0.332	4.02	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-39-3	BARIUM	65.4		0.0332	1.01	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-41-7	BERYLLIUM	0.453	J	0.0673	1.01	mg/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-42-8	BORON	6.3	J	0.834	10.1	mg/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-43-9	CADMIUM	0.511	J	0.0332	1.01	mg/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-47-3	CHROMIUM	12.4		0.0885	3.02	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-48-4	COBALT	4.18		0.0905	1.01	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-50-8	COPPER	5.92		0.181	2.01	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-62-2	NADIUM (FUME OR DUST)	26.7		0.111	1.01	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-66-6	ZINC	76.4		0.201	4.02	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-67-7	ZIRCONIUM	2.48	J	0.834	5.03	mg/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6/11/2013	PH046	1.5	1	7440-70-2	CALCIUM METAL	2620		4.04	20.1	mg/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	6010C	6																	



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8082A	6/12/2013	PH046	1.5	1	37324-23-5	Aroclor 1262	17	U	3.4	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8082A	6/12/2013	PH046	1.5	1	53469-21-9	Aroclor 1242	17	U	4.2	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8082A	6/12/2013	PH046	1.5	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	117-84-0	Di-n-octylphthalate	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	120-12-7	ANTHRACENE	17	U	3.4	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	129-00-0	PYRENE	8.4	J	6.8	17	ug/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	131-11-3	DIMETHYL PHTHALATE	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	191-24-2	BENZO(G,H,I)PERYLENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	192-97-2	Benzo(e)pyrene	170	U	34	170	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	193-39-5	INDENO(1,2,3-CD)PYRENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	205-99-2	BENZO(B)FLUORANTHENE	13	J	6.8	17	ug/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	206-44-0	FLUORANTHENE	8.3	J	6.8	17	ug/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	207-08-9	BENZO(K)FLUORANTHENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	208-96-8	ACENAPHTHYLENE	17	U	3.4	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	218-01-9	Chrysene	20		3.4	17	ug/kg				1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	50-32-8	BENZO(A)PYRENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	53-70-3	DIBENZO(A,H)ANTHRACENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	56-55-3	BENZO(A)ANTHRACENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	83-32-9	ACENAPHTHENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	84-66-2	DIETHYL PHTHALATE	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	84-74-2	Di-n-butylphthalate	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	85-01-8	PHENANTHRENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	85-68-7	BENZYL BUTYL PHTHALATE	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	86-73-7	FLUORENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	90-12-0	1-METHYLNAPHTHALENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-913-SA7-SB-0.0-0.5	6/4/2013	FD	0	0.5	ft	SO	7_DG	SL-513-SA7-SB-0.0-0.5	7081062	LL	8270D SIM	6/13/2013	PH046	1.5	10	91-20-3	NAPHTHALENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8015M	5/2/2013	PH039	1.1	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8015M	5/2/2013	PH039	1.1	1	PHCC21C30	EFH (C21-C30)	25		2.0	5.1	mg/kg				1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8015M	5/2/2013	PH039	1.1	1	PHCC30C40	EFH (C30-C40)	42	J	4.0	10	mg/kg		J	L	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8015M	5/2/2013	PH039	1.1	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	11097-69-1	Aroclor 1254	110	J	4.4	17	ug/kg		J	S	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	11104-28-2	Aroclor 1221	17	U	5.1	17	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	11126-42-4	Aroclor 5460	49	J	9.9	33	ug/kg		J	S, E	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	12642-23-8	Aroclor 5442	33	UJ	9.9	33	ug/kg	U	UJ	E	1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1785686.756	268207.979	-118.70997	34.234931
SL-508-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036187	LL	8082A	5/3/2013	PH039	1.1	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1785686.756	268207.979		



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	2385-85-5	MIREX	1.7	U	0.36	1.7	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	309-00-2	ALDRIN	0.85	U	0.17	0.85	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	319-84-6	ALPHA-BHC	0.85	U	0.17	0.85	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	319-85-7	BETA-BHC	1.9	U	0.98	1.9	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	319-86-8	DELTA-BHC	0.85	U	0.46	0.85	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	33213-65-9	ENDOSULFAN II	1.7	U	0.34	1.7	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	50-29-3	4,4'-DDT	0.83	J	0.36	1.7	ug/kg	J	J	Z	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	53494-70-5	ENDRIN KETONE	1.8	U	0.61	1.8	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	57-74-9	CHLORDANE	17	U	4.1	17	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	58-89-9	gamma-BHC (Lindane)	0.85	U	0.17	0.85	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	60-57-1	DIELDRIN	1.7	U	0.34	1.7	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	72-20-8	ENDRIN	1.7	U	0.34	1.7	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	72-43-5	Methoxychlor	6.9	U	1.7	6.9	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	72-54-8	4,4'-DDD	1.7	U	0.34	1.7	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	72-55-9	4,4'-DDE	1.7	U	0.34	1.7	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	7421-93-4	ENDRIN ALDEHYDE	1.7	U	0.34	1.7	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	76-44-8	HEPTACHLOR	0.85	U	0.17	0.85	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	8001-35-2	Toxaphene	34	U	14	34	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8081B	4/27/2013	PH036	2.3	1	959-98-8	ENDOSULFAN I	0.85	U	0.23	0.85	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8015M	4/26/2013	PH036	2.3	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8015M	4/26/2013	PH036	2.3	1	PHCC15C20	EFH (C15-C20)	2.3	J	2.0	5.1	mg/kg	J	J	Z	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8015M	4/26/2013	PH036	2.3	1	PHCC21C30	EFH (C21-C30)	13		2.0	5.1	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8015M	4/26/2013	PH036	2.3	1	PHCC30C40	EFH (C30-C40)	48	J	4.1	10	mg/kg		J	L	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8015M	4/26/2013	PH036	2.3	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	7471B	4/26/2013	PH036	2.3	1	7439-97-6	MERCURY	0.0293		0.0100	0.0162	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6020A	4/29/2013	PH036	2.3	2	7440-22-4	SILVER	0.0521	J	0.0203	0.203	mg/kg	J	J	Z	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6020A	4/29/2013	PH036	2.3	2	7440-24-6	STRONTIUM	37	J	0.0345	0.405	mg/kg		J	Q	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6020A	4/29/2013	PH036	2.3	2	7440-28-0	THALLIUM	0.22		0.0304	0.203	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6020A	4/29/2013	PH036	2.3	2	7782-49-2	SELENIUM	0.131	J	0.101	0.405	mg/kg	J	J	Z	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7429-90-5	ALUMINUM (FUME OR DUST)	11100		7.81	40.5	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7439-89-6	IRON	19100		3.85	40.5	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7439-92-1	LEAD	23.7	J	0.476	3.04	mg/kg		J	E, Q	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7439-93-2	LITHIUM	21.1		0.56	4.1	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7439-95-4	MAGNESIUM	4670		1.75	10.1	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7439-96-5	MANGANESE	310		0.0841	1.01	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7439-98-7	MOLYBDENUM	2.03	U	0.172	2.03	mg/kg	J	U	F	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7440-02-0	NICKEL	11.2		0.111	2.03	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7440-09-7	POTASSIUM	3420	J	13.7	101	mg/kg		J	Q	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7440-23-5	SODIUM	101	U	16.9	101	mg/kg	J	U	F	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7440-31-5	TIN	10.1	U	0.223	10.1	mg/kg	J	U	B	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7440-32-6	TITANIUM METAL POWDER	926		0.172	1.01	mg/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7440-36-0	ANTIMONY	4.05	UJ	0.507	4.05	mg/kg	U	UJ	Q	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	6010C	4/28/2013	PH036	2.3	1	7440-38-2	ARSENIC	4.97		0.334	4.05	mg/kg				178			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7439-98-7	MOLYBDENUM	2.03	U	0.173	2.03	mg/kg	J	U	F	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-02-0	NICKEL	11.2	U	0.112	2.03	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-09-7	POTASSIUM	2940	J	13.7	101	mg/kg		J	Q	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-23-5	SODIUM	101	U	16.9	101	mg/kg	J	U	F	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-31-5	TIN	10.1	U	0.223	10.1	mg/kg	J	U	B	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-32-6	TITANIUM METAL POWDER	1000		0.173	1.01	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-36-0	ANTIMONY	0.692	J	0.507	4.06	mg/kg	J	J	Q, Z	1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-38-2	ARSENIC	5.38		0.335	4.06	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-39-3	BARIUM	73		0.0335	1.01	mg/kg				1785674.75	268149.525	-118.71001	34.23477
SL-509-SA7-SB-0.0-0.5	4/25/2013	N	0	0.5	ft	SO	7_DG		7036185	LL	6010C	5/3/2013	PH039	3.4	1	7440-41-7	BERYLLIUM	0.486	J	0.0680	1.01	mg/kg	J	J	Z	1785674.75	268149.525	-118.71001	34.23477
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	117-84-0	Di-n-octylphthalate	20	U	6.5	20	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	120-12-7	ANTHRACENE	1.8	U	0.36	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	129-00-0	PYRENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	131-11-3	DIMETHYL PHTHALATE	20	U	6.5	20	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	191-24-2	BENZO(G,H,I)PERYLENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	192-97-2	Benzo(e)pyrene	18	U	3.6	18	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	205-99-2	BENZO(B)FLUORANTHENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	206-44-0	FLUORANTHENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	207-08-9	BENZO(K)FLUORANTHENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	208-96-8	ACENAPHTHYLENE	1.8	U	0.36	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	218-01-9	Chrysene	1.8	U	0.36	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	50-32-8	BENZO(A)PYRENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	56-55-3	BENZO(A)ANTHRACENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	83-32-9	ACENAPHTHENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	84-66-2	DIETHYL PHTHALATE	20	U	6.5	20	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	84-74-2	Di-n-butylphthalate	20	U	6.5	20	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	85-01-8	PHENANTHRENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	85-68-7	BENZYL BUTYL PHTHALATE	20	U	6.5	20	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	86-73-7	FLUORENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	90-12-0	1-METHYLNAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	91-20-3	NAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	8270D SIM	6/10/2013	PH045	7.7	1	91-57-6	2-METHYLNAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	9045M	6/4/2013	PH045	7.7	1	pH	pH	6.98		0.0100	0.0100	pH unit				1785553.714	268031.837	-118.71041	34.234445
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	160.3M	6/11/2013	PH045	4.1	1	MOIST	MOISTURE	4.1		0.10	0.10	%				1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	1613B	6/12/2013	PH045	4.1	1	1746-01-6	2,3,7,8-TCDD	0.0439	J	0.0405	1.03	ng/kg	JQ	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	1613B	6/12/2013	PH045	4.1	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.17	U	0.0398	5.17	ng/kg	JBQ	U	B	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	1613B	6/12/2013	PH045	4.1	1	3268-87-9	OCDD	17.5		0.0351	10.3	ng/kg	B			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	1613B	6/12/2013	PH045	4.1	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	1.98	J	0.0457	5.17	ng/kg	JB	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	1613B	6/12/2013	PH045	4.1	1	39001-02-0	OCDF	10.3	U	0.0373	10.3	ng/kg	JB	U	B	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	1613B	6/12/2013	PH045	4.1	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN</												



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	6010C	6/11/2013	PH045	4.1	2	7439-89-6	IRON	29600		7.92	83.4	mg/kg				1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	6020A	6/11/2013	PH045	4.1	2	7440-22-4	SILVER	0.209	U	0.0209	0.209	mg/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	6020A	6/11/2013	PH045	4.1	2	7440-24-6	STRONTIUM	15.2		0.0355	0.417	mg/kg				1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	6020A	6/11/2013	PH045	4.1	2	7440-28-0	THALLIUM	0.352		0.0313	0.209	mg/kg				1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	6020A	6/11/2013	PH045	4.1	2	7782-49-2	SELENIUM	0.151	J	0.104	0.417	mg/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	7471B	6/11/2013	PH045	4.1	1	7439-97-6	MERCURY	0.0206		0.0103	0.0171	mg/kg				1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8015M	6/10/2013	PH045	4.1	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8015M	6/10/2013	PH045	4.1	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8015M	6/10/2013	PH045	4.1	1	PHCC21C30	EFH (C21-C30)	6.5		2.1	5.2	mg/kg				1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8015M	6/10/2013	PH045	4.1	1	PHCC30C40	EFH (C30-C40)	15		4.2	10	mg/kg				1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8015M	6/10/2013	PH045	4.1	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8015M	6/9/2013	PH045	4.1	26.6	GROC5C12	GASOLINE RANGE ORGANICS (C5-C12)	1.1	U	0.2	1.1	mg/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	11096-82-5	Aroclor 1260	18	U	4.1	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	11097-69-1	Aroclor 1254	18	U	4.6	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	53469-21-9	Aroclor 1242	18	U	4.3	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8082A	6/10/2013	PH045	4.1	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	7.5	J	6.3	19	ug/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	117-84-0	Di-n-octylphthalate	19	U	6.3	19	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	120-12-7	ANTHRACENE	1.7	U	0.35	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	129-00-0	PYRENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	205-99-2	BENZO(B)FLUORANTHENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	206-44-0	FLUORANTHENE	0.75	J	0.70	1.7	ug/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	218-01-9	Chrysene	0.58	J	0.35	1.7	ug/kg	J	J	Z	1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	83-32-9	ACENAPHTHENE	1.7	U	0.70	1.7	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315
SL-532-SA7-SB-3.0-4.0	6/3/2013	N	3	4	ft	SO	7_DG		7079476	LL	8270D SIM	6/11/2013	PH045	4.1	1	84-66-2	DIETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785280.886	267986.469	-118.71131	34.234315</



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-31-5	TIN	10.4	U	0.229	10.4	mg/kg	J	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-32-6	TITANIUM METAL POWDER	1280		0.177	1.04	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-36-0	ANTIMONY	4.16	U	0.520	4.16	mg/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-38-2	ARSENIC	3.93	J	0.343	4.16	mg/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-39-3	BARIUM	88.1		0.0343	1.04	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-41-7	BERYLLIUM	0.48	J	0.0696	1.04	mg/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-42-8	BORON	1.87	J	0.863	10.4	mg/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-43-9	CADMIUM	0.37	J	0.0343	1.04	mg/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-47-3	CHROMIUM	18.5		0.0915	3.12	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-48-4	COBALT	4.59		0.0936	1.04	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-62-2	VANADIUM (FUME OR DUST)	32.9		0.114	1.04	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-66-6	ZINC	59.2		0.208	4.16	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-67-7	ZIRCONIUM	5.2	UJ	0.863	5.20	mg/kg	U	UJ	FD	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7440-70-2	CALCIUM METAL	5580	J	4.18	20.8	mg/kg		J	FD, E	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/12/2013	PH046	7.5	1	7723-14-0	PHOSPHORUS	401	J	0.530	10.4	mg/kg		J	Q	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6010C	6/14/2013	PH046	7.5	5	7440-50-8	COPPER	10.3	J	0.936	10.4	mg/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6020A	6/11/2013	PH046	7.5	2	7440-22-4	SILVER	0.208	UJ	0.0208	0.208	mg/kg	U	UJ	FD	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6020A	6/11/2013	PH046	7.5	2	7440-24-6	STRONTIUM	17.9	J	0.0353	0.416	mg/kg		J	E	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6020A	6/11/2013	PH046	7.5	2	7440-28-0	THALLIUM	0.285		0.0312	0.208	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	6020A	6/11/2013	PH046	7.5	2	7782-49-2	SELENIUM	0.416	U	0.104	0.416	mg/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	7471B	6/16/2013	PH046	7.5	1	7439-97-6	MERCURY	0.0178	U	0.0107	0.0178	mg/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8015M	6/12/2013	PH046	7.5	1	PHCC12C14	EFH (C12-C14)	5.4	U	2.2	5.4	mg/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8015M	6/12/2013	PH046	7.5	1	PHCC15C20	EFH (C15-C20)	5.4	U	2.2	5.4	mg/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8015M	6/12/2013	PH046	7.5	1	PHCC21C30	EFH (C21-C30)	12	J	2.2	5.4	mg/kg		J	Q	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8015M	6/12/2013	PH046	7.5	1	PHCC30C40	EFH (C30-C40)	23		4.3	11	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8015M	6/12/2013	PH046	7.5	1	PHCC8C11	EFH (C8-C11)	5.4	U	2.2	5.4	mg/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8015M	6/9/2013	PH046	7.5	22.89	GROC5C12	GASOLINE RANGE ORGANICS (C5-C12)	1	U	0.2	1	mg/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	11096-82-5	Aroclor 1260	18	U	4.2	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	11097-69-1	Aroclor 1254	18	U	4.8	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	11100-14-4	Aroclor 1268	18	U	3.6	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	11104-28-2	Aroclor 1221	18	U	5.5	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	11126-42-4	Aroclor 5460	36	U	11	36	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	11141-16-5	Aroclor 1232	18	U	4.4	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	12642-23-8	Aroclor 5442	36	U	11	36	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	12672-29-6	Aroclor 1248	18	U	3.6	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	12674-11-2	Aroclor 1016	18	U	3.6	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	37324-23-5	Aroclor 1262	18	U	3.6	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	53469-21-9	Aroclor 1242	18	U	4.4	18	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8082A	6/12/2013	PH046	7.5	1	63496-31-1	Aroclor 5432	36	U	11	36	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8270D SIM	6/13/2013	PH046	7.5	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.5	19	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8270D SIM	6/13/2013	PH046	7.5	1	117-84-0	Di-n-octylphthalate	19	U	6.5	19	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8270D SIM	6/13/2013	PH046	7.5	1	120-12-7	ANTHRACENE	1.8	U	0.36	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8270D SIM	6/13/2013	PH046	7.5	1	129-00-0	PYRENE	2.5	J	0.72	1.8	ug/kg		J	FD, Q	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	8270D SIM	6/13/2013	PH046	7.5	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.5	19	ug/kg	U						



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	11096-82-5	Aroclor 1260	18	U	4.1	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	11097-69-1	Aroclor 1254	18	U	4.7	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	11100-14-4	Aroclor 1268	18	U	3.5	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	11104-28-2	Aroclor 1221	18	U	5.4	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	11126-42-4	Aroclor 5460	35	U	11	35	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	11141-16-5	Aroclor 1232	18	U	4.4	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	12642-23-8	Aroclor 5442	35	U	11	35	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	12672-29-6	Aroclor 1248	18	U	3.5	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	12674-11-2	Aroclor 1016	18	U	3.5	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	37324-23-5	Aroclor 1262	18	U	3.5	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	53469-21-9	Aroclor 1242	18	U	4.4	18	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545B-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081056	LL	8082A	6/10/2013	PH046	6	1	63496-31-1	Aroclor 5432	35	U	11	35	ug/kg	U			1785302.73	267719.639	-118.71123	34.233582
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	160.3M	6/11/2013	PH046	3.8	1	MOIST	MOISTURE	3.8		0.10	0.10	%				1785282.319	267719.559	-118.71113	34.233581
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	8082A	6/10/2013	PH046	3.8	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785282.319	267719.559	-118.71113	34.233581
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	8082A	6/10/2013	PH046	3.8	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1785282.319	267719.559	-118.71113	34.233581
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	8082A	6/10/2013	PH046	3.8	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1785282.319	267719.559	-118.71113	34.233581
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	8082A	6/10/2013	PH046	3.8	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1785282.319	267719.559	-118.71113	34.233581
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	8082A	6/10/2013	PH046	3.8	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785282.319	267719.559	-118.71113	34.233581
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	8082A	6/10/2013	PH046	3.8	1	11141-16-5	Aroclor 1232	17	U	4.2	17	ug/kg	U			1785282.319	267719.559	-118.71113	34.233581
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	8082A	6/10/2013	PH046	3.8	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785282.319	267719.559	-118.71113	34.233581
SL-545C-SA7-SB-0.0-0.5	6/3/2013	N	0	0.5	ft	SO	7_DG		7081057	LL	8082A	6/10/2013	PH046	3.8	1	12672-29-6	Aroclor 1248	17	U	3.4	17	ug/kg	U			1785282.319	267719.559	-118.71113	34.233581
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	12.9		0.0542	5.05	ng/kg	B			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	39001-02-0	OCDF	4.63	J	0.0572	10.1	ng/kg	JB	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.144	J	0.0536	5.05	ng/kg	JBQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.05	U	0.0438	5.05	ng/kg	JBQ	U	B	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.224	J	0.0501	1.01	ng/kg	JQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.05	U	0.0683	5.05	ng/kg	JBQ	U	B	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	57117-31-4	2,3,4,7,8-PCDF	0.288	J	0.0331	5.05	ng/kg	JBQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.304	J	0.0337	5.05	ng/kg	JBQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.169	J	0.0390	5.05	ng/kg	JBQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.488	J	0.0583	5.05	ng/kg	JQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.167	J	0.0366	5.05	ng/kg	JBQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	1.8	J	0.0499	5.05	ng/kg	JB	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.248	J	0.0419	5.05	ng/kg	JBQ	J	Z	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.05	U	0.0322	5.05	ng/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	1613B	5/6/2013	PH039	3.6	1	TCDD TEQ	TCDD TEQ	0.195			0	ng/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	8082A	5/3/2013	PH039	3.6	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6010C	5/3/2013	PH039	3.6	1	7429-90-5	ALUMINUM (FUME OR DUST)	11500		7.76	40.3	mg/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6010C	5/3/2013	PH039	3.6	1	7439-89-6	IRON	19700		3.83	40.3	mg/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6010C	5/3/2013	PH039	3.6	1	7439-92-1	LEAD	9.87	J	0.473	3.02	mg/kg		J	E, Q	1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6010C	5/3/2013	PH039	3.6	1	7439-93-2	LITHIUM	22.4		0.55	4.0	mg/kg				1785641.471	268119.464	-118.71012	34.234687
SL-507-SA7-SB-0.0-0.5	4/24/2013	N	0	0.5	ft	SO	7_DG		7036177	LL	6010C	5/3/2013	PH039	3.6	1	7439-95-4	MAGNESIUM	4470		1.74	10.1	mg/kg				1785641.471	268119.464	-118.71012	34.234687
SL-50																													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8270D SIM	4/30/2013	PH036	3	10	84-66-2	DIETHYL PHTHALATE	190	U	62	190	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8270D SIM	4/30/2013	PH036	3	10	84-74-2	Di-n-butylphthalate	190	U	62	190	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8270D SIM	4/30/2013	PH036	3	10	85-01-8	PHENANTHRENE	17	U	6.9	17	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8270D SIM	4/30/2013	PH036	3	10	85-68-7	BENZYL BUTYL PHTHALATE	190	U	62	190	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8270D SIM	4/30/2013	PH036	3	10	86-73-7	FLUORENE	17	U	6.9	17	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8270D SIM	4/30/2013	PH036	3	10	90-12-0	1-METHYLNAPHTHALENE	17	U	6.9	17	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8270D SIM	4/30/2013	PH036	3	10	91-20-3	NAPHTHALENE	17	U	6.9	17	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8270D SIM	4/30/2013	PH036	3	10	91-57-6	2-METHYLNAPHTHALENE	17	U	6.9	17	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	11096-82-5	Aroclor 1260	18	U	4.0	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	11097-69-1	Aroclor 1254	41	U	4.5	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	11126-42-4	Aroclor 5460	57	U	10	34	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	11141-16-5	Aroclor 1232	18	U	4.2	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	53469-21-9	Aroclor 1242	18	U	3.4	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8082A	4/27/2013	PH036	3	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	1024-57-3	HEPTACHLOR EPOXIDE	0.86	U	0.39	0.86	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	1031-07-8	ENDOSULFAN SULFATE	1.8	U	0.34	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	2385-85-5	MIREX	1.8	U	0.36	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	309-00-2	ALDRIN	0.86	U	0.18	0.86	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	319-84-6	ALPHA-BHC	0.86	U	0.18	0.86	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	319-85-7	BETA-BHC	2	U	0.99	2.0	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	319-86-8	DELTA-BHC	0.86	U	0.46	0.86	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	33213-65-9	ENDOSULFAN II	1.8	U	0.34	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	50-29-3	4,4'-DDT	5.1	U	5.1	5.1	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	53494-70-5	ENDRIN KETONE	1.9	U	0.62	1.9	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	57-74-9	CHLORDANE	18	U	4.1	18	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	58-89-9	gamma-BHC (Lindane)	0.86	U	0.18	0.86	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	60-57-1	DIELDRIN	1.8	U	0.42	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	72-20-8	ENDRIN	1.8	U	0.40	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	72-43-5	Methoxychlor	6.9	U	1.8	6.9	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	72-54-8	4,4'-DDD	1.8	U	0.34	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	72-55-9	4,4'-DDE	1.9	U	1.9	1.9	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	7421-93-4	ENDRIN ALDEHYDE	1.8	U	0.34	1.8	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	76-44-8	HEPTACHLOR	0.86	U	0.18	0.86	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	8001-35-2	Toxaphene	34	U	14	34	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8081B	4/27/2013	PH036	3	1	959-98-8	ENDOSULFAN I	0.86	U	0.23	0.86	ug/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8015M	4/26/2013	PH036	3	5	PHCC12C14	EFH (C12-C14)	26	U	10	26	mg/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	8015M	4/26/2013	PH036	3	5	PHCC15C20	EFH (C15-C20)	26	U	10	26	mg/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO																							



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	214		0.0604	5.13	ng/kg	B			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	39001-02-0	OCDF	108		0.0270	10.3	ng/kg	B			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	3.1	J	0.0381	5.13	ng/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	1.13	J	0.0473	5.13	ng/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.04		0.0577	1.03	ng/kg	C			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	2.32	J	0.0471	5.13	ng/kg	JB	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	57117-31-4	2,3,4,7,8-PCDF	0.95	J	0.0248	5.13	ng/kg	JB	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	1.35	J	0.0266	5.13	ng/kg	JB	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	57117-44-9	1,2,3,6,7,8-HXCDF	1.22	J	0.0383	5.13	ng/kg	JB	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	7.06		0.0374	5.13	ng/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	60851-34-5	2,3,4,6,7,8-HXCDF	1.7	J	0.0373	5.13	ng/kg	JB	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	36.6		0.0381	5.13	ng/kg	B			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	70648-26-9	1,2,3,4,7,8-HXCDF	1.49	J	0.0398	5.13	ng/kg	JB	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.13	U	0.0392	5.13	ng/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	1613B	5/2/2013	PH036	3	1	TCDD TEQ	TCDD TEQ	6.64		0	0	ng/kg				1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031219	LL	160.3M	4/25/2013	PH036	3	1	MOIST	MOISTURE	3		0.10	0.10	%				1785836.347	268285.98	-118.70948	34.235148
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	9045M	4/23/2013	PH036	2.3	1	pH	PH	7.88		0.0100	0.0100	pH unit				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8270D SIM	4/30/2013	PH036	2.3	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	8.4	J	6.1	18	ug/kg	J	J	Z	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8270D SIM	4/30/2013	PH036	2.3	1	117-84-0	Di-n-octylphthalate	18	U	6.1	18	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8270D SIM	4/30/2013	PH036	2.3	1	120-12-7	ANTHRACENE	0.45	J	0.34	1.7	ug/kg	J	J	Z	1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8270D SIM	4/30/2013	PH036	2.3	1	129-00-0	PYRENE	3.9		0.68	1.7	ug/kg				1785850.157	268328.113	-118.70943	34.235264
SL-503-SA7-SB-0.0-0.5	4/22/2013	N	0	0.5	ft	SO	7_DG		7031218	LL	8270D SIM	4/30/2013	PH036	2.3	1	131-11-3	DIMETHYL PHTHALATE	18	U	6.1	18	ug/kg	U			1785850.157	268328.113	-118.70943	34.235264
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	6010C	6/11/2013	PH045	3.7	1	7440-70-2	CALCIUM METAL	2080		4.05	20.2	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	6010C	6/11/2013	PH045	3.7	1	7723-14-0	PHOSPHORUS	191		0.514	10.1	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	6020A	6/11/2013	PH045	3.7	2	7440-22-4	SILVER	0.0319	J	0.0202	0.202	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	6020A	6/11/2013	PH045	3.7	2	7440-24-6	STRONTIUM	12.7		0.0343	0.403	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	6020A	6/11/2013	PH045	3.7	2	7440-28-0	THALLIUM	0.185	J	0.0302	0.202	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	6020A	6/11/2013	PH045	3.7	2	7782-49-2	SELENIUM	0.403	U	0.101	0.403	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	7471B	6/11/2013	PH045	3.7	1	7439-97-6	MERCURY	0.011	J	0.0101	0.0169	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8015M	6/10/2013	PH045	3.7	1	PHCC12C14	EFH (C12-C14)	5.2	U	2.1	5.2	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8015M	6/10/2013	PH045	3.7	1	PHCC15C20	EFH (C15-C20)	5.2	U	2.1	5.2	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8015M	6/10/2013	PH045	3.7	1	PHCC21C30	EFH (C21-C30)	5.2	U	2.1	5.2	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8015M	6/10/2013	PH045	3.7	1	PHCC30C40	EFH (C30-C40)	5.8	J	4.1	10	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8015M	6/10/2013	PH045	3.7	1	PHCC8C11	EFH (C8-C11)	5.2	U	2.1	5.2	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8015M	6/9/2013	PH045	3.7	23.23	GROC5C12	GASOLINE RANGE ORGANICS (C5-C12)	1	U	0.2	1	mg/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8082A	6/10/2013	PH045	3.7	1	11096-82-5	Aroclor 1260	18	U	4.0	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8082A	6/10/2013	PH045	3.7	1	11097-69-1	Aroclor 1254	18	U	4.5	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8082A	6/10/2013	PH045	3.7	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8082A	6/10/2013	PH045	3.7	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8082A	6/10/2013	PH045	3.7	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8082A	6/10/2013	PH045	3.7	1	11141-16-5	Aroclor 1232	18	U	4.2	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	8082A	6/10/2013	PH045	3.7	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785630.291	268055.856	-118.71015	34.23451



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.0742	J	0.0215	5.38	ng/kg	JQ	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.38	U	0.0352	5.38	ng/kg	JB	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0708	J	0.0293	1.08	ng/kg	JQ	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.38	U	0.0222	5.38	ng/kg	JBQ	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	57117-31-4	2,3,4,7,8-PECDF	5.38	U	0.0161	5.38	ng/kg	JBQ	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.38	U	0.0172	5.38	ng/kg	JBQ	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.114	J	0.0189	5.38	ng/kg	JB	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.38	U	0.0235	5.38	ng/kg	JB	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.38	U	0.0201	5.38	ng/kg	JB	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.38	U	0.0143	5.38	ng/kg	JBQ	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.38	U	0.0201	5.38	ng/kg	JB	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.38	U	0.0233	5.38	ng/kg	JBQ	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	1613B	6/12/2013	PH045	7.7	1	TCDD TEQ	TCDD TEQ	0.311		0	0	ng/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7429-90-5	ALUMINUM (FUME OR DUST)	18400		8.19	42.5	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7439-89-6	IRON	20600		4.04	42.5	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7439-92-1	LEAD	5.96		0.499	3.19	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7439-93-2	LITHIUM	23.4		0.58	4.2	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7439-95-4	MAGNESIUM	3220		1.84	10.6	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7439-96-5	MANGANESE	180		0.0882	1.06	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7439-98-7	MOLYBDENUM	2.12	U	0.181	2.12	mg/kg	J	U	F, B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-02-0	NICKEL	5.91		0.117	2.12	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-09-7	POTASSIUM	1330	J	14.3	106	mg/kg		J	Q	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-23-5	SODIUM	106		17.7	106	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-31-5	TIN	10.6	U	0.234	10.6	mg/kg	J	U	B	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-32-6	TITANIUM METAL POWDER	1010		0.181	1.06	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-36-0	ANTIMONY	0.959	J	0.531	4.25	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-38-2	ARSENIC	6.72		0.351	4.25	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-39-3	BARIUM	41.6		0.0351	1.06	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-41-7	BERYLLIUM	0.789	J	0.0712	1.06	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-42-8	BORON	7.42	J	0.882	10.6	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-43-9	CADMIUM	0.402	J	0.0351	1.06	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-47-3	CHROMIUM	15		0.0935	3.19	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-48-4	COBALT	4.07		0.0956	1.06	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-50-8	COPPER	5.12		0.191	2.12	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-62-2	VANADIUM (FUME OR DUST)	36.6		0.117	1.06	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-66-6	ZINC	34.8		0.212	4.25	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-67-7	ZIRCONIUM	2.93	J	0.882	5.31	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7440-70-2	CALCIUM METAL	1720		4.27	21.2	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6010C	6/11/2013	PH045	7.7	1	7723-14-0	PHOSPHORUS	234		0.542	10.6	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6020A	6/11/2013	PH045	7.7	2	7440-22-4	SILVER	0.0362	J	0.0212	0.212	mg/kg	J		Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6020A	6/11/2013	PH045	7.7	2	7440-24-6	STRONTIUM	11.9		0.0361	0.425	mg/kg				1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0	6/3/2013	N	9	10	ft	SO	7_DG		7079475	LL	6020A	6/11/2013	PH045	7.7	2	7440-28-0	THALLIUM	0.176	J	0.0319	0.212	mg/kg	J	J	Z	1785553.714	268031.837	-118.71041	34.234445
SL-526-SA7-SB-9.0-10.0																													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8270D SIM	6/13/2013	PH046	3.9	1	84-74-2	Di-n-butylphthalate	19	U	6.2	19	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8270D SIM	6/13/2013	PH046	3.9	1	85-01-8	PHENANTHRENE	1.7	U	0.69	1.7	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8270D SIM	6/13/2013	PH046	3.9	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.2	19	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8270D SIM	6/13/2013	PH046	3.9	1	86-73-7	FLUORENE	1.7	U	0.69	1.7	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8270D SIM	6/13/2013	PH046	3.9	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8270D SIM	6/13/2013	PH046	3.9	1	91-20-3	NAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8270D SIM	6/13/2013	PH046	3.9	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	9045M	6/5/2013	PH046	3.9	1	pH	PH	8.14		0.0100	0.0100	pH unit				1785892.449	268111.781	-118.70929	34.234671
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	160.3M	6/11/2013	PH046	7.1	1	MOIST	MOISTURE	7.1		0.10	0.10	%				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	1746-01-6	2,3,7,8-TCDD	1.04	U	0.0173	1.04	ng/kg	JBQ	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	19408-74-3	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.22	U	0.0198	5.22	ng/kg	JB	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	3268-87-9	OCDD	41		0.0295	10.4	ng/kg	B			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	2.69	J	0.0243	5.22	ng/kg	JB	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	39001-02-0	OCDF	1.19	J	0.0188	10.4	ng/kg	JB	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.22	U	0.0201	5.22	ng/kg	JB	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.22	U	0.0219	5.22	ng/kg	JB	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0282	J	0.0207	1.04	ng/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.22	U	0.0127	5.22	ng/kg	JB	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	57117-31-4	2,3,4,7,8-PECDF	5.22	U	0.0129	5.22	ng/kg	JBQ	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.646	J	0.0143	5.22	ng/kg	JB	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.129	J	0.0131	5.22	ng/kg	JBQ	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.171	J	0.0212	5.22	ng/kg	JB	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.177	J	0.0125	5.22	ng/kg	JB	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	0.644	J	0.0111	5.22	ng/kg	JB	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.22	U	0.0136	5.22	ng/kg	JBQ	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.22	U	0.0141	5.22	ng/kg	JB	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	1613B	6/15/2013	PH046	7.1	1	TCDD TEQ	TCDD TEQ	0.221		0	0	ng/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7429-90-5	ALUMINIUM (FUME OR DUST)	11300		8.14	42.2	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7439-89-6	IRON	19000		4.01	42.2	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7439-92-1	LEAD	4.2		0.496	3.17	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7439-93-2	LITHIUM	20.4		0.58	4.2	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7439-95-4	MAGNESIUM	3960		1.83	10.6	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7439-96-5	MANGANESE	258		0.0876	1.06	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7439-98-7	MOLYBDENUM	2.11	U	0.179	2.11	mg/kg	J	U	F	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-02-0	NICKEL	9.34		0.116	2.11	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-09-7	POTASSIUM	2560		14.2	106	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-23-5	SODIUM	111		17.6	106	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-31-5	TIN	10.6	U	0.232	10.6	mg/kg	J	U	B	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-32-6	TITANIUM METAL POWDER	926		0.179	1.06	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-36-0	ANTIMONY	4.22	U	0.528	4.22	mg/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-38-2	ARSENIC	4.01	J	0.348	4.22	mg/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-39-3	BARIUM	70.4		0.0348	1.06	mg/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	6010C	6/17/2013	PH046	7.1	1	7440-41-7													



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	191-24-2	BENZO(G,H,I)PERYLENE	1.9		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	192-97-2	Benzo(e)pyrene	13	J	3.6	18	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.1	J	0.72	1.8	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	205-99-2	BENZO(B)FLUORANTHENE	8		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	206-44-0	FLUORANTHENE	3.1		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	207-08-9	BENZO(K)FLUORANTHENE	1.9		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	208-96-8	ACENAPHTHYLENE	1.8	U	0.36	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	218-01-9	Chrysene	20		0.36	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	50-32-8	BENZO(A)PYRENE	3.7		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.1	J	0.72	1.8	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	56-55-3	BENZO(A)ANTHRACENE	4.3		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	83-32-9	ACENAPHTHENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	84-66-2	DIETHYL PHTHALATE	19	U	6.5	19	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	84-74-2	Di-n-butylphthalate	19	U	6.5	19	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	85-01-8	PHENANTHRENE	16		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.5	19	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	86-73-7	FLUORENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	90-12-0	1-METHYLNAPHTHALENE	1.7	J	0.72	1.8	ug/kg	J	J	Z	1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	91-20-3	NAPHTHALENE	1.8	U	0.72	1.8	ug/kg	U			1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	8270D SIM	6/13/2013	PH046	7.1	1	91-57-6	2-METHYLNAPHTHALENE	2		0.72	1.8	ug/kg				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081068	LL	9045M	6/5/2013	PH046	7.1	1	pH	PH	8.25		0.0100	0.0100	pH unit				1785674.345	267781.79	-118.71	34.23376
SL-524-SA7-SB-1.0-2.0	6/4/2013	N	1	2	ft	SO	7_DG		7081064	LL	160.3M	6/11/2013	PH046	7.5	1	MOIST	MOISTURE	7.5		0.10	0.10	%				1785674.345	267781.79	-118.71	34.23376
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	1746-01-6	2,3,7,8-TCDD	1.04	U	0.0195	1.04	ng/kg	U			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.755	J	0.0275	5.20	ng/kg	JB	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	3268-87-9	OCDD	153		0.0222	10.4	ng/kg	B			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	21.2		0.0275	5.20	ng/kg	B			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	39001-02-0	OCDF	11.1		0.0227	10.4	ng/kg	B			1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.329	J	0.0280	5.20	ng/kg	JQ	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.163	J	0.0254	5.20	ng/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.133	J	0.0306	1.04	ng/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.313	J	0.0322	5.20	ng/kg	JBQ	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	57117-31-4	2,3,4,7,8-PCEDF	0.187	J	0.0145	5.20	ng/kg	JB	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.203	J	0.0152	5.20	ng/kg	JBQ	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.206	J	0.0232	5.20	ng/kg	JBQ	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.835	J	0.0286	5.20	ng/kg	J	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-504-SA7-SB-4.0-5.0	4/22/2013	N	4	5	ft	SO	7_DG		7031220	LL	1613B	5/2/2013	PH036	5.5	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.255	J	0.0227	5.20	ng/kg	JBQ	J	Z	1785836.347	268285.98	-118.70948	34.235148
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.11	U	0.0312	5.11	ng/kg	JBQ	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.11	U	0.0273	5.11	ng/kg	JBQ	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	0.572	J	0.0211	5.11	ng/kg	JB	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.11	U	0.0265	5.11	ng/kg	JB	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	1613B	6/12/2013	PH045	4.1	1	72918-21-9	2,3,7,8,9-HXCDF	5.11	U	0.0347	5.11	ng/kg	JB	U	B	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL																			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	11096-82-5	Aroclor 1260	9.5	J	4.1	18	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	11097-69-1	Aroclor 1254	18	U	4.6	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	53469-21-9	Aroclor 1242	18	U	4.3	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8082A	6/10/2013	PH045	4.1	1	63496-31-1	Aroclor 5432	34	U	10	34	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	117-84-0	Di-n-octylphthalate	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	120-12-7	ANTHRACENE	1.7	U	0.35	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	129-00-0	PYRENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	205-99-2	BENZO(B)FLUORANTHENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	206-44-0	FLUORANTHENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	218-01-9	Chrysene	0.43	J	0.35	1.7	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	83-32-9	ACENAPHTHENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	84-66-2	DIETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	84-74-2	Di-n-butylphthalate	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	85-01-8	PHENANTHRENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	85-68-7	BENZYL BUTYL PHTHALATE	19	U	6.3	19	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	86-73-7	FLUORENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	91-20-3	NAPHTHALENE	1.3	J	0.70	1.7	ug/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	8270D SIM	6/11/2013	PH045	4.1	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.70	1.7	ug/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-4.0-5.0	6/3/2013	N	4	5	ft	SO	7_DG		7079479	LL	9045M	6/4/2013	PH045	4.1	1	pH	PH	7.14		0.0100	0.0100	pH unit				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	160.3M	6/11/2013	PH045	3.7	1	MOIST	MOISTURE	3.7		0.10	0.10	%				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	1613B	6/12/2013	PH045	3.7	1	1746-01-6	2,3,7,8-TCDD	1.03	U	0.0334	1.03	ng/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	1613B	6/12/2013	PH045	3.7	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.13	U	0.0235	5.13	ng/kg	U			1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	1613B	6/12/2013	PH045	3.7	1	3268-87-9	OCDD	2.3	J	0.0343	10.3	ng/kg	JB	J	Z	1785630.291	26805		



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	QOM Qualifiers	QOM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	6010C	6/11/2013	PH045	3.7	1	7440-66-6	ZINC	36.8		0.202	4.03	mg/kg				1785630.291	268055.856	-118.71015	34.234512
SL-525-SA7-SB-9.5-10.5	6/3/2013	N	9.5	10.5	ft	SO	7_DG		7079480	LL	6010C	6/11/2013	PH045	3.7	1	7440-67-7	ZIRCONIUM	3.2	J	0.837	5.04	mg/kg	J	J	Z	1785630.291	268055.856	-118.71015	34.234512
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	319-85-7	BETA-BHC	1.9	U	0.98	1.9	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	319-86-8	DELTA-BHC	0.85	U	0.46	0.85	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	33213-65-9	ENDOSULFAN II	1.7	U	0.34	1.7	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	50-29-3	4,4'-DDT	7	J	0.36	1.7	ug/kg		J	Q	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	53494-70-5	ENDRIN KETONE	1.8	U	0.61	1.8	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	57-74-9	CHLORDANE	17	U	4.1	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	58-89-9	gamma-BHC (Lindane)	0.85	U	0.17	0.85	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	60-57-1	DIELDRIN	1.7	U	0.34	1.7	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	72-20-8	ENDRIN	1.7	U	0.34	1.7	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	72-43-5	Methoxychlor	6.8	U	1.7	6.8	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	72-54-8	4,4'-DDD	1.7	U	0.34	1.7	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	72-55-9	4,4'-DDE	0.53	J	0.34	1.7	ug/kg	J	J	FD, Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	7421-93-4	ENDRIN ALDEHYDE	1.7	U	0.34	1.7	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	76-44-8	HEPTACHLOR	0.85	U	0.17	0.85	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	8001-35-2	Toxaphene	34	U	14	34	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8081B	6/20/2013	PH046	1.8	1	959-98-8	ENDOSULFAN I	0.85	U	0.22	0.85	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	11096-82-5	Aroclor 1260	17	U	3.9	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	11097-69-1	Aroclor 1254	13	J	4.5	17	ug/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	11100-14-4	Aroclor 1268	17	U	3.3	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	11104-28-2	Aroclor 1281	17	U	5.2	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	11126-42-4	Aroclor 5460	33	UJ	10	33	ug/kg	U	UJ	FD	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	11141-16-5	Aroclor 1232	17	U	4.1	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	12642-23-8	Aroclor 5442	33	U	10	33	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	12672-29-6	Aroclor 1248	17	U	3.3	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	12674-11-2	Aroclor 1016	17	U	3.3	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	37324-23-5	Aroclor 1262	17	U	3.3	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	53469-21-9	Aroclor 1242	17	U	4.1	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8082A	6/10/2013	PH046	1.8	1	63496-31-1	Aroclor 5432	33	U	10	33	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	117-84-0	Di-n-octylphthalate	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	120-12-7	ANTHRACENE	17	U	3.4	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	129-00-0	PYRENE	7.5	J	6.8	17	ug/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	131-11-3	DIMETHYL PHTHALATE	180	U	61	180	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	191-24-2	BENZO(G,H,I)PERYLENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	192-97-2	Benzo(e)pyrene	170	U	34	170	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	193-39-5	INDENO(1,2,3-CD)PYRENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	205-99-2	BENZO(B)FLUORANTHENE	18		6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	206-44-0	FLUORANTHENE	7	J	6.8	17	ug/kg	J	J	Z	1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	207-08-9	BENZO(K)FLUORANTHENE	17	U	6.8	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	208-96-8	ACENAPHTHYLENE	17	U	3.4	17	ug/kg	U			1786064.318	268182.882	-118.70872	34.234869
SL-513-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081058	LL	8270D SIM	6/13/2013	PH046	1.8	10	218-01-9	Chrysene	23		3.4	17	ug/kg	U			1786064.31			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7439-95-4	MAGNESIUM	5790		1.76	10.2	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7439-96-5	MANGANESE	308		0.0847	1.02	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7439-98-7	MOLYBDENUM	2.04	U	0.173	2.04	mg/kg	J	U	F, B	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-02-0	NICKEL	10.5		0.112	2.04	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-09-7	POTASSIUM	2930	J	13.8	102	mg/kg		J	Q	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-23-5	SODIUM	319		17.0	102	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-31-5	TIN	10.2	U	0.224	10.2	mg/kg	J	U	B	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-32-6	TITANIUM METAL POWDER	1270		0.173	1.02	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-36-0	ANTIMONY	4.08	U	0.510	4.08	mg/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-38-2	ARSENIC	5.1		0.337	4.08	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-39-3	BARIUM	72.9		0.0337	1.02	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-41-7	BERYLLIUM	0.538	J	0.0684	1.02	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-42-8	BORON	6.24	J	0.847	10.2	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-43-9	CADMIUM	0.518	J	0.0337	1.02	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-47-3	CHROMIUM	19.4		0.0898	3.06	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-48-4	COBALT	5.41		0.0918	1.02	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-50-8	COPPER	6.89		0.184	2.04	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-62-2	VANADIUM (FUME OR DUST)	39.3		0.112	1.02	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-66-6	ZINC	58.8		0.204	4.08	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-67-7	ZIRCONIUM	2.72	J	0.847	5.10	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7440-70-2	CALCIUM METAL	4380		4.10	20.4	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6010C	6/11/2013	PH046	3.9	1	7723-14-0	PHOSPHORUS	410		0.520	10.2	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6020A	6/11/2013	PH046	3.9	2	7782-49-2	SELENIUM	0.108	J	0.102	0.408	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6020A	6/11/2013	PH046	3.9	2	7440-22-4	SILVER	0.0368		0.0204	0.204	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6020A	6/11/2013	PH046	3.9	2	7440-24-6	STRONTIUM	15		0.0347	0.408	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	6020A	6/11/2013	PH046	3.9	2	7440-28-0	THALLIUM	0.304		0.0306	0.204	mg/kg				1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	7471B	6/11/2013	PH046	3.9	1	7439-97-6	MERCURY	0.0108	J	0.0102	0.0170	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8015M	6/10/2013	PH046	3.9	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.1	5.1	mg/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8015M	6/10/2013	PH046	3.9	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.1	5.1	mg/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8015M	6/10/2013	PH046	3.9	1	PHCC21C30	EFH (C21-C30)	3.4	J	2.1	5.1	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8015M	6/10/2013	PH046	3.9	1	PHCC30C40	EFH (C30-C40)	4.8	J	4.1	10	mg/kg	J	J	Z	1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8015M	6/10/2013	PH046	3.9	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.1	5.1	mg/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	11096-82-5	Aroclor 1260	18	U	4.1	18	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	11097-69-1	Aroclor 1254	18	U	4.6	18	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	11100-14-4	Aroclor 1268	18	U	3.4	18	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	11126-42-4	Aroclor 5460	34	U	10	34	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	12642-23-8	Aroclor 5442	34	U	10	34	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	12672-29-6	Aroclor 1248	18	U	3.4	18	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	12674-11-2	Aroclor 1016	18	U	3.4	18	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	37324-23-5	Aroclor 1262	18	U	3.4	18	ug/kg	U			1785892.449	268111.781	-118.70929	34.234671
SL-516-SA7-SB-0.0-0.5	6/4/2013	N	0	0.5	ft	SO	7_DG		7081063	LL	8082A	6/12/2013	PH046	3.9	1	53469-21-9	Aroclor 1242	18	U	4.3	18	ug/kg	U			1785892.449			



Master Chemical Database Table for Phase 3 - Subarea 7

Sample Name	Sample Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Method Reporting Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	192-97-2	Benzo(e)pyrene	17	U	3.4	17	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	205-99-2	BENZO(B)FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	206-44-0	FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.34	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	218-01-9	Chrysene	0.42	J	0.34	1.7	ug/kg	J	J	Z	1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	83-32-9	ACENAPHTHENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	84-66-2	DIETHYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	84-74-2	Di-n-butylphthalate	18	U	6.2	18	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	85-01-8	PHENANTHRENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	85-68-7	BENZYL BUTYL PHTHALATE	18	U	6.2	18	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	86-73-7	FLUORENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	90-12-0	1-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	91-20-3	NAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	8270D SIM	10/9/2013	PH121	3	1	91-57-6	2-METHYLNAPHTHALENE	1.7	U	0.69	1.7	ug/kg	U			1785078.501	267681.635	-118.71197	34.233473
SL-541-SA7-SB-2.0-3.0	10/2/2013	N	2	3	ft	SO	7_DG		7222779	LL	9045M	10/3/2013	PH121	3	1	pH	PH	8.27		0.0100	0.0100	pH unit				1785078.501	267681.635	-118.71197	34.233473



Master Chemical Database Table for Phase 3 - Northern Buffer Zone																													
Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	160.3M	12/11/2013	PH138	7.2	1	MOIST	MOISTURE	7.2		0.10	0.10	%				1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8015M	12/12/2013	PH138	7.2	1	PHCC12C14	EFH (C12-C14)	5.4	U	2.2	5.4	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8015M	12/12/2013	PH138	7.2	1	PHCC15C20	EFH (C15-C20)	5.4	U	2.2	5.4	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8015M	12/12/2013	PH138	7.2	1	PHCC21C30	EFH (C21-C30)	5.4	U	2.2	5.4	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8015M	12/12/2013	PH138	7.2	1	PHCC30C40	EFH (C30-C40)	11	U	4.3	11	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8015M	12/12/2013	PH138	7.2	1	PHCC8C11	EFH (C8-C11)	5.4	U	2.2	5.4	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	1024-57-3	HEPTACHLOR EPOXIDE	0.89	U	0.18	0.89	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	1031-07-8	ENDOSULFAN SULFATE	1.8	U	0.36	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	2385-85-5	MIREX	1.8	U	0.38	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	309-00-2	ALDRIN	0.89	U	0.18	0.89	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	319-84-6	ALPHA-BHC	0.89	U	0.18	0.89	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	319-85-7	BETA-BHC	2	U	1.0	2.0	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	319-86-8	DELTA-BHC	0.89	U	0.48	0.89	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	33213-65-9	ENDOSULFAN II	1.8	U	0.36	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	50-29-3	4,4'-DDT	1.8	U	0.38	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	53494-70-5	ENDRIN KETONE	1.9	U	0.65	1.9	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	57-74-9	CHLORDANE	18	U	4.3	18	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	58-89-9	gamma-BHC (Lindane)	0.89	U	0.18	0.89	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	60-57-1	DIELDRIN	1.8	U	0.36	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	72-20-8	ENDRIN	1.8	U	0.36	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	72-43-5	Methoxychlor	7.2	U	1.8	7.2	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	72-54-8	4,4'-DDD	1.8	U	0.36	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	72-55-9	4,4'-DDE	1.8	U	0.36	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	7421-93-4	ENDRIN ALDEHYDE	1.8	U	0.36	1.8	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	76-44-8	HEPTACHLOR	0.89	U	0.18	0.89	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	8001-35-2	Toxaphene	36	U	15	36	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300094	LL	8081B	12/16/2013	PH138	7.2	1	959-98-8	ENDOSULFAN I	0.89	U	0.24	0.89	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	160.3M	12/11/2013	PH138	9.4	1	MOIST	MOISTURE	9.4		0.10	0.10	%				1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8015M	12/12/2013	PH138	9.4	1	PHCC12C14	EFH (C12-C14)	5.5	U	2.2	5.5	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8015M	12/12/2013	PH138	9.4	1	PHCC15C20	EFH (C15-C20)	5.5	U	2.2	5.5	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8015M	12/12/2013	PH138	9.4	1	PHCC21C30	EFH (C21-C30)	5.5	U	2.2	5.5	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8015M	12/12/2013	PH138	9.4	1	PHCC30C40	EFH (C30-C40)	11	U	4.4	11	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8015M	12/12/2013	PH138	9.4	1	PHCC8C11	EFH (C8-C11)	5.5	U	2.2	5.5	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8015M	12/6/2013	PH138	9.4	25.25	GROC5C12	GASOLINE RANGE ORGANICS (C5-C12)	1.1	U	0.2	1.1	mg/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8081B	12/16/2013	PH138	9.4	1	1024-57-3	HEPTACHLOR EPOXIDE	0.92	U	0.19	0.92	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8081B	12/16/2013	PH138	9.4	1	1031-07-8	ENDOSULFAN SULFATE	1.9	U	0.36	1.9	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8081B	12/16/2013	PH138	9.4	1	2385-85-5	MIREX	1.9	U	0.39	1.9	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8081B	12/16/2013	PH138	9.4	1	309-00-2	ALDRIN	0.92	U	0.19	0.92	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8081B	12/16/2013	PH138	9.4	1	319-84-6	ALPHA-BHC	0.92	U	0.19	0.92	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8081B	12/16/2013	PH138	9.4	1	319-85-7	BETA-BHC	2.1	U	1.1	2.1	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8081B	12/16/2013	PH138	9.4	1	319-86-8	DELTA-BHC	0.92	U	0.50	0.92	ug/kg	U			1782205.158	266264.405	-118.721444	34.229523
SL-502-NBZ-SB-4.0-5.0	12/3/2013	N	4	5	ft	SO	NBZ_DG		7300095	LL	8081B	12/16/2013	PH138	9.4	1	33213-65-9	ENDOSULFAN II	1.9	U	0.36									



Master Chemical Database Table for Phase 3 - Northern Buffer Zone																													
Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-503-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300096	LL	8081B	12/16/2013	PH138	3.8	1	8001-35-2	Toxaphene	34	U	14	34	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300096	LL	8081B	12/16/2013	PH138	3.8	1	959-98-8	ENDOSULFAN I	0.85	U	0.23	0.85	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	160.3M	12/11/2013	PH138	2	1	MOIST	MOISTURE	2		0.10	0.10	%				1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8015M	12/12/2013	PH138	2	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8015M	12/12/2013	PH138	2	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8015M	12/12/2013	PH138	2	1	PHCC21C30	EFH (C21-C30)	5.1	U	2.0	5.1	mg/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8015M	12/12/2013	PH138	2	1	PHCC30C40	EFH (C30-C40)	10	U	4.1	10	mg/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8015M	12/12/2013	PH138	2	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8015M	12/6/2013	PH138	2	25	GROCS5C12	GASOLINE RANGE ORGANICS (C5-C12)	1	U	0.2	1.0	mg/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	1024-57-3	HEPTACHLOR EPOXIDE	0.85	U	0.17	0.85	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	1031-07-8	ENDOSULFAN SULFATE	1.7	U	0.34	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	2385-85-5	MIREX	1.7	U	0.36	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	309-00-2	ALDRIN	0.85	U	0.17	0.85	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	319-84-6	ALPHA-BHC	0.85	U	0.17	0.85	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	319-85-7	BETA-BHC	1.9	U	0.98	1.9	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	319-86-8	DELTA-BHC	0.85	U	0.46	0.85	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	33213-65-9	ENDOSULFAN II	1.7	U	0.34	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	50-29-3	4,4'-DDT	1.7	U	0.36	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	53494-70-5	ENDRIN KETONE	1.8	U	0.61	1.8	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	57-74-9	CHLORDANE	17	U	4.1	17	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	58-89-9	gamma-BHC (Lindane)	0.85	U	0.17	0.85	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	60-57-1	DIELDRIN	1.7	U	0.34	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	72-20-8	ENDRIN	1.7	U	0.34	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	72-43-5	Methoxychlor	6.8	U	1.7	6.8	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	72-54-8	4,4'-DDD	1.7	U	0.34	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	72-55-9	4,4'-DDE	1.7	U	0.34	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	7421-93-4	ENDRIN ALDEHYDE	1.7	U	0.34	1.7	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	76-44-8	HEPTACHLOR	0.85	U	0.17	0.85	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	8001-35-2	Toxaphene	34	U	14	34	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-503-NBZ-SB-2.0-3.0	12/3/2013	N	2	3	ft	SO	NBZ_DG		7300097	LL	8081B	12/16/2013	PH138	2	1	959-98-8	ENDOSULFAN I	0.85	U	0.22	0.85	ug/kg	U			1782108.606	266330.771	-118.721765	34.229703
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	160.3M	12/11/2013	PH138	2.2	1	MOIST	MOISTURE	2.2		0.10	0.10	%				1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8015M	12/12/2013	PH138	2.2	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8015M	12/12/2013	PH138	2.2	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8015M	12/12/2013	PH138	2.2	1	PHCC21C30	EFH (C21-C30)	5.1	U	2.0	5.1	mg/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8015M	12/12/2013	PH138	2.2	1	PHCC30C40	EFH (C30-C40)	10	U	4.1	10	mg/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8015M	12/12/2013	PH138	2.2	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8081B	12/16/2013	PH138	2.2	1	1024-57-3	HEPTACHLOR EPOXIDE	0.84	U	0.17	0.84	ug/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8081B	12/16/2013	PH138	2.2	1	1031-07-8	ENDOSULFAN SULFATE	1.7	U	0.33	1.7	ug/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8081B	12/16/2013	PH138	2.2	1	2385-85-5	MIREX	1.7	U	0.35	1.7	ug/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8081B	12/16/2013	PH138	2.2	1	309-00-2	ALDRIN	0.84	U	0.17	0.84	ug/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8081B	12/16/2013	PH138	2.2	1	319-84-6	ALPHA-BHC	0.84	U	0.17	0.84	ug/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300098	LL	8081B	12/16/2013	PH138	2.2	1	319-85-7	BETA-BHC	1.9	U	0.97	1.9	ug/kg	U			1782182.93	266351.696	-118.721519	34.229762
SL-504-NBZ-S																													



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	208-96-8	ACENAPHTHYLENE	1.8	U	0.37	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	218-01-9	Chrysene	1.8	U	0.37	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	50-32-8	BENZO(A)PYRENE	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	56-55-3	BENZO(A)ANTHRACENE	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	83-32-9	ACENAPHTHENE	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	84-66-2	DIETHYL PHTHALATE	20	U	6.6	20	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	84-74-2	Di-n-butylphthalate	20	U	6.6	20	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	85-01-8	PHENANTHRENE	1.2	J	0.74	1.8	ug/kg	J	J	Z	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	85-68-7	BENZYL BUTYL PHTHALATE	20	U	6.6	20	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	86-73-7	FLUORENE	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	90-12-0	1-METHYLNAPHTHALENE	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	91-20-3	NAPHTHALENE	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	8270D SIM	12/24/2013	PH139	9.4	1	91-57-6	2-METHYLNAPHTHALENE	1.8	U	0.74	1.8	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-0.0-0.5	12/4/2013	N	0	0.5	ft	SO	NBZ_DG		7301920	LL	9045M	12/5/2013	PH139	9.4	1	pH	PH	6.93		0.0100	0.0100	pH unit				1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	160.3M	12/12/2013	PH139	10	1	MOIST	MOISTURE	10		0.10	0.10	%				1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	1746-01-6	2,3,7,8-TCDD	1.1	U	0.0782	1.10	ng/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.5	U	0.0360	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	3268-87-9	OCDD	11	U	0.0432	11.0	ng/kg	JB	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	5.5	U	0.0341	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	39001-02-0	OCDF	11	U	0.0597	11.0	ng/kg	JB	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.5	U	0.0376	5.50	ng/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.5	U	0.0513	5.50	ng/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.1	U	0.0753	1.10	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.5	U	0.0236	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	57117-31-4	2,3,4,7,8-PECDF	5.5	U	0.0307	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.5	U	0.0333	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.5	U	0.0359	5.50	ng/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.5	U	0.0397	5.50	ng/kg	JB	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.5	U	0.0328	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.5	U	0.0186	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.5	U	0.0369	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	1613B	12/16/2013	PH139	10	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.5	U	0.0373	5.50	ng/kg	JBQ	U	B	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8015M	12/16/2013	PH139	10	22.44	GROCS5C12	GASOLINE RANGE ORGANICS (C5-C12)	1	U	0.2	1	mg/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8015M	12/12/2013	PH139	10	1	PHCC12C14	EFH (C12-C14)	5.5	U	2.2	5.5	mg/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8015M	12/12/2013	PH139	10	1	PHCC15C20	EFH (C15-C20)	5.5	U	2.2	5.5	mg/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8015M	12/12/2013	PH139	10	1	PHCC21C30	EFH (C21-C30)	3.2	J	2.2	5.5	mg/kg	J	J	Z	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8015M	12/12/2013	PH139	10	1	PHCC30C40	EFH (C30-C40)	8.2	J	4.4	11	mg/kg	J	J	Z	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8015M	12/12/2013	PH139	10	1	PHCC8C11	EFH (C8-C11)	5.5	U	2.2	5.5	mg/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8081B	12/16/2013	PH139	10	1	1024-57-3	HEPTACHLOR EPOXIDE	0.92	U	0.19	0.92	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-0.5	12/4/2013	N	4	5	ft	SO	NBZ_DG		730																				



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.9	U	0.74	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	205-99-2	BENZO(B)FLUORANTHENE	1.9	U	0.74	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	206-44-0	FLUORANTHENE	1.9	U	0.74	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	207-08-9	BENZO(K)FLUORANTHENE	1.9	U	0.74	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	208-96-8	ACENAPHTHYLENE	1.9	U	0.37	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	218-01-9	Chrysene	0.48	J	0.37	1.9	ug/kg	J	J	Z	1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	50-32-8	BENZO(A)PYRENE	1.9	U	0.74	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.9	U	0.74	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	56-55-3	BENZO(A)ANTHRACENE	1.9	U	0.74	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-508-NBZ-SB-4.0-5.0	12/4/2013	N	4	5	ft	SO	NBZ_DG		7301921	LL	8270D SIM	12/24/2013	PH139	10	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.9	U	0.74	1.9	ug/kg	U			1781543.515	267025.926	-118.723651	34.231602
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	1613B	12/25/2013	PH155	4.1	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.07	U	0.0190	5.07	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	1613B	12/25/2013	PH155	4.1	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.07	U	0.0315	5.07	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	1613B	12/25/2013	PH155	4.1	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.07	U	0.0185	5.07	ng/kg	JBO	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	1613B	12/25/2013	PH155	4.1	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.07	U	0.0158	5.07	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	1613B	12/25/2013	PH155	4.1	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.07	U	0.0193	5.07	ng/kg	JBO	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	1613B	12/25/2013	PH155	4.1	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.07	U	0.0217	5.07	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7439-92-1	LEAD	19.2		0.516	3.10	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7439-93-2	LITHIUM	42.1		0.35	4.1	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7439-96-5	MANGANESE	348		0.0857	1.03	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7439-98-7	MOLYBDENUM	2.06	U	0.176	2.06	mg/kg	J	U	F	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-02-0	NICKEL	21.4		0.134	2.06	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-09-7	POTASSIUM	4530		8.61	103	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-23-5	SODIUM	97.6	J	17.2	103	mg/kg	J	J	Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-31-5	TIN	10.3	U	0.227	10.3	mg/kg	J	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-32-6	TITANIUM METAL POWDER	1250		0.176	1.03	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-36-0	ANTIMONY	2.22	J	0.764	4.13	mg/kg	J	J	Q, Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-38-2	ARSENIC	10.2		0.723	4.13	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-39-3	BARIUM	123		0.0341	1.03	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-41-7	BERYLLIUM	1.18		0.0692	1.03	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-42-8	BORON	9.81	J	0.867	10.3	mg/kg	J	J	Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-43-9	CADMIUM	1.03	U	0.0785	1.03	mg/kg	U			1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-47-3	CHROMIUM	32.6		0.165	3.10	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-48-4	COBALT	9.94		0.102	1.03	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-50-8	COPPER	25.2		0.299	2.06	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-62-2	VANADIUM (FUME OR DUST)	64.9		0.134	1.03	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-66-6	ZINC	108		0.206	4.13	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7440-67-7	ZIRCONIUM	4.64	J	0.867	5.16	mg/kg	J	J	Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/26/2013	PH155	4.1	1	7723-14-0	PHOSPHORUS	595	J	2.98	10.3	mg/kg		J	Q	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/27/2013	PH155	4.1	1	7429-90-5	ALUMINUM (FUME OR DUST)	26000		7.44	41.3	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/27/2013	PH155	4.1	1	7439-95-4	MAGNESIUM	8270		1.72	10.3	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/27/2013	PH155	4.1	1	7440-70-2	CALCIUM METAL	5140		3.45	20.6	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6010C	12/27/2013	PH155	4.1	2	7439-89-6	IRON	38300		7.47	82.6	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7315437	LL	6020A	1/4/2014	PH155	4.1	2	7440-22-4	SILVER	0.106	J	0.0268	0.206	mg							



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	1746-01-6	2,3,7,8-TCDD	0.0455	J	0.0415	1.06	ng/kg	JQ	J	Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5.28	U	0.0199	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	3268-87-9	OCDD	10.6	U	0.0185	10.6	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	5.28	U	0.0178	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	39001-02-0	OCDF	10.6	U	0.0236	10.6	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.28	U	0.0207	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.28	U	0.0257	5.28	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.0363	J	0.0289	1.06	ng/kg	JQ	J	Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.28	U	0.0111	5.28	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	57117-31-4	2,3,4,7,8-PECDF	5.28	U	0.0136	5.28	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.28	U	0.0145	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.28	U	0.0128	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.28	U	0.0217	5.28	ng/kg	JB	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.28	U	0.0118	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.28	U	0.00971	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.28	U	0.0129	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	1613B	12/25/2013	PH155	6.3	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.28	U	0.0126	5.28	ng/kg	JBQ	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7439-92-1	LEAD	18.1		0.528	3.17	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7439-93-2	LITHIUM	41.3		0.36	4.2	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7439-96-5	MANGANESE	372		0.0877	1.06	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7439-98-7	MOLYBDENUM	2.11	U	0.180	2.11	mg/kg	U			1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-02-0	NICKEL	21.5		0.137	2.11	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-09-7	POTASSIUM	3490		8.81	106	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-23-5	SODIUM	131		17.6	106	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-31-5	TIN	10.6	U	0.232	10.6	mg/kg	J	U	B	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-32-6	TITANIUM METAL POWDER	1030		0.180	1.06	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-36-0	ANTIMONY	2.25	J	0.782	4.23	mg/kg	J	J	Q, Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-38-2	ARSENIC	9.97		0.740	4.23	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-39-3	BARIUM	1.12		0.0349	1.06	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-41-7	BERYLLIUM	1.17		0.0708	1.06	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-42-8	BORON	7.71	J	0.888	10.6	mg/kg	J	J	Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-43-9	CADMIUM	1.06	U	0.0803	1.06	mg/kg	U			1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-47-3	CHROMIUM	30		0.169	3.17	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-48-4	COBALT	11.3		0.105	1.06	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-50-8	COPPER	24.2		0.306	2.11	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-62-2	VANADIUM (FUME OR DUST)	56.3		0.137	1.06	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-66-6	ZINC	103		0.211	4.23	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7440-67-7	ZIRCONIUM	4.14	J	0.888	5.28	mg/kg	J	J	Z	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/26/2013	PH155	6.3	1	7723-14-0	PHOSPHORUS	500	J	3.05	10.6	mg/kg		J	Q	1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/27/2013	PH155	6.3	1	7429-90-5	ALUMINUM (FUME OR DUST)	23100		7.62	42.3	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/27/2013	PH155	6.3	1	7439-95-4	MAGNESIUM	7910		1.76	10.6	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/27/2013	PH155	6.3	1	7440-70-2	CALCIUM METAL	4070		3.53	21.1	mg/kg				1782162.395	267208.227	-118.721608	34.232115
SL-517-NBZ-SB-2.0-3.0	#####	N	2	3	ft	SO	NBZ_DG		7315438	LL	6010C	12/27/2013	PH155	6.3	2	7439-													



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	58-89-9	gamma-BHC (Lindane)	0.32	J	0.18	0.88	ug/kg	J		Z	1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	60-57-1	DIELDRIN	0.52	J	0.35	1.8	ug/kg	J	J	Z	1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	72-20-8	ENDRIN	0.41	J	0.35	1.8	ug/kg	J	J	Z	1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	72-43-5	Methoxychlor	7.1	U	1.8	7.1	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	72-54-8	4,4'-DDD	1.8	U	0.52	1.8	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	72-55-9	4,4'-DDE	2.1		0.35	1.8	ug/kg				1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	7421-93-4	ENDRIN ALDEHYDE	0.71	J	0.35	1.8	ug/kg	J	J	Z	1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	76-44-8	HEPTACHLOR	0.88	U	0.18	0.88	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	8001-35-2	Toxaphene	38	U	38	38	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8081B	12/17/2013	PH140	5.2	1	959-98-8	ENDOSULFAN I	0.88	U	0.23	0.88	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	11096-82-5	Aroclor 1260	18	U	4.1	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	11097-69-1	Aroclor 1254	18	U	4.6	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	11100-14-4	Aroclor 1268	18	U	3.5	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	11104-28-2	Aroclor 1221	18	U	5.3	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	11126-42-4	Aroclor 5460	35	U	10	35	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	11141-16-5	Aroclor 1232	18	U	4.3	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	12642-23-8	Aroclor 5442	35	U	10	35	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	12672-29-6	Aroclor 1248	18	U	3.5	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	12674-11-2	Aroclor 1016	18	U	3.5	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	37324-23-5	Aroclor 1262	18	U	3.5	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	53469-21-9	Aroclor 1242	18	U	4.3	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8082A	12/16/2013	PH140	5.2	1	63496-31-1	Aroclor 5432	35	U	10	35	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	21		6.3	19	ug/kg				1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	117-84-0	Di-n-octylphthalate	19	U	6.3	19	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	120-12-7	ANTHRACENE	1.7	U	0.35	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	129-00-0	PYRENE	0.92	J	0.70	1.7	ug/kg	J	J	Z	1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	131-11-3	DIMETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	191-24-2	BENZO(G,H,I)PERYLENE	1.7	U	0.70	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	192-97-2	Benzo(e)pyrene	18	U	3.5	18	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	193-39-5	INDENO(1,2,3-CD)PYRENE	1.7	U	0.70	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	205-99-2	BENZO(B)FLUORANTHENE	0.82	J	0.70	1.7	ug/kg	J	J	Z	1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	206-44-0	FLUORANTHENE	1.2	J	0.70	1.7	ug/kg	J	J	Z	1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	207-08-9	BENZO(K)FLUORANTHENE	1.7	U	0.70	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	208-96-8	ACENAPHTHYLENE	1.7	U	0.35	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	218-01-9	Chrysene	1.6	J	0.35	1.7	ug/kg	J	J	Z	1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	50-32-8	BENZO(A)PYRENE	1.7	U	0.70	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	53-70-3	DIBENZO(A,H)ANTHRACENE	1.7	U	0.70	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	56-55-3	BENZO(A)ANTHRACENE	1.7	U	0.70	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	62-75-9	METHANAMINE, N-METHYL-N-NITROSO	1.7	U	0.70	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	83-32-9	ACENAPHTHENE	1.7	U	0.70	1.7	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	84-66-2	DIETHYL PHTHALATE	19	U	6.3	19	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306309	LL	8270D SIM	12/29/2013	PH140	5.2	1	84-74-2	Di-n-butylphthalate	19	U	6.3	19	ug/kg	U			1783944.091	268700.145	-118.715748	34.23625
SL-528-NBZ-SB-0.0-0.5	12/5/2013	N	0																										



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-529-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306310	LL	8081B	12/17/2013	PH140	7.2	1	72-43-5	Methoxychlor	7.2	U	1.8	7.2	ug/kg	U			1783745.495	269138.788	-118.716416	34.237451
SL-529-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306310	LL	8081B	12/17/2013	PH140	7.2	1	72-54-8	4,4'-DDD	1.8	U	0.36	1.8	ug/kg	U			1783745.495	269138.788	-118.716416	34.237451
SL-529-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306310	LL	8081B	12/17/2013	PH140	7.2	1	72-55-9	4,4'-DDE	1.6	J	0.36	1.8	ug/kg	J	J	Z	1783745.495	269138.788	-118.716416	34.237451
SL-529-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306310	LL	8081B	12/17/2013	PH140	7.2	1	7421-93-4	ENDRIN ALDEHYDE	0.36	J	0.36	1.8	ug/kg	J	J	Z	1783745.495	269138.788	-118.716416	34.237451
SL-529-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306310	LL	8081B	12/17/2013	PH140	7.2	1	76-44-8	HEPTACHLOR	0.89	U	0.18	0.89	ug/kg	U			1783745.495	269138.788	-118.716416	34.237451
SL-529-NBZ-SB-0.0-0.5	12/5/2013	N	0	0.5	ft	SO	NBZ_DG		7306310	LL	8081B	12/17/2013	PH140	7.2	1	8001-35-2	Toxaphene	36	U	15	36	ug/kg	U			1783745.495	269138.788	-118.716416	34.237451
SL-540-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312454	LL	8270D SIM	12/29/2013	PH148	15.2	1	90-12-0	1-METHYLNAPHTHALENE	2.4	J	0.79	2.0	ug/kg		J	FD	1786657.311	270658.372	-118.706817	34.241683
SL-540-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312454	LL	8270D SIM	12/29/2013	PH148	15.2	1	91-20-3	NAPHTHALENE	5.3		0.79	2.0	ug/kg				1786657.311	270658.372	-118.706817	34.241683
SL-540-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312454	LL	8270D SIM	12/29/2013	PH148	15.2	1	91-57-6	2-METHYLNAPHTHALENE	2.9	J	0.79	2.0	ug/kg		J	FD	1786657.311	270658.372	-118.706817	34.241683
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	160.3M	12/18/2013	PH148	3.7	1	MOIST	MOISTURE	3.7		0.10	0.10	%				1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	1746-01-6	2,3,7,8-TCDD	1.01	U	0.0988	1.01	ng/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	19408-74-3	1,2,3,7,8-9-HEXACHLORODIBENZO-P-DIOXIN	0.878	J	0.0538	5.07	ng/kg	JQ	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	3268-87-9	OCDD	468		0.0595	10.1	ng/kg	B			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	58.3		0.0826	5.07	ng/kg	B			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	39001-02-0	OCDF	38.3		0.0505	10.1	ng/kg	B			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.343	J	0.0535	5.07	ng/kg	JQ	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.304	J	0.0781	5.07	ng/kg	JQ	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.134	J	0.0917	1.01	ng/kg	J	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	1.22	J	0.0442	5.07	ng/kg	JB	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	57117-31-4	2,3,4,7,8-PCDF	0.325	J	0.0427	5.07	ng/kg	JBQ	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.316	J	0.0435	5.07	ng/kg	JB	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.419	J	0.0442	5.07	ng/kg	J	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	2.78	J	0.0587	5.07	ng/kg	JB	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.577	J	0.0436	5.07	ng/kg	JB	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	14.5		0.0344	5.07	ng/kg	B			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.426	J	0.0479	5.07	ng/kg	JB	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	1613B	12/23/2013	PH148	3.7	1	72918-21-9	1,2,3,7,8,9-HXCDF	0.207	J	0.0484	5.07	ng/kg	JBQ	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	1024-57-3	HEPTACHLOR EPOXIDE	0.86	U	0.18	0.86	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	1031-07-8	ENDOSULFAN SULFATE	1.8	U	0.34	1.8	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	2385-85-5	MIREX	0.62	J	0.36	1.8	ug/kg	J	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	309-00-2	ALDRIN	0.86	U	0.18	0.86	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	319-84-6	ALPHA-BHC	0.86	U	0.18	0.86	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	319-85-7	BETA-BHC	2	U	0.99	2.0	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	319-86-8	DELTA-BHC	0.86	U	0.46	0.86	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	33213-65-9	ENDOSULFAN II	1.8	U	0.34	1.8	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	50-29-3	4,4'-DDT	1.8	U	0.36	1.8	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	53494-70-5	ENDRIN KETONE	1.9	U	0.62	1.9	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	57-74-9	CHLORDANE	18	U	4.1	18	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	58-89-9	gamma-BHC (Lindane)	0.86	U	0.18	0.86	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	60-57-1	DIELDRIN	1.8	U	0.34	1.8	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	72-20-8	ENDRIN	1.8	U	0.34	1.8	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8081B	12/19/2013	PH148	3.7	1	72-43-5	Methoxychlor	6.9	U	1.8	6.9	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	808																		



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8270D SIM	12/31/2013	PH148	3.7	1	86-73-7	FLUORENE	1.7	U	0.69	1.7	ug/kg	U			1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8270D SIM	12/31/2013	PH148	3.7	1	90-12-0	1-METHYLNAPHTHALENE	0.74	J	0.69	1.7	ug/kg	J	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8270D SIM	12/31/2013	PH148	3.7	1	91-20-3	NAPHTHALENE	1.8		0.69	1.7	ug/kg				1786734.75	270342.348	-118.706554	34.240816
SL-541-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312458	LL	8270D SIM	12/31/2013	PH148	3.7	1	91-57-6	2-METHYLNAPHTHALENE	0.93	J	0.69	1.7	ug/kg	J	J	Z	1786734.75	270342.348	-118.706554	34.240816
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	160.3M	12/18/2013	PH148	6.4	1	MOIST	MOISTURE	6.4		0.10	0.10	%				1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	1746-01-6	2,3,7,8-TCDD	1.07	U	0.0863	1.07	ng/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	0.799	J	0.0481	5.34	ng/kg	J	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	3268-87-9	OCDD	453		0.0563	10.7	ng/kg	B			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	44.8		0.0732	5.34	ng/kg	B			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	39001-02-0	OCDF	28.7		0.0528	10.7	ng/kg	B			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	0.404	J	0.0473	5.34	ng/kg	JO	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	0.151	J	0.0613	5.34	ng/kg	JO	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.127	J	0.0786	1.07	ng/kg	JO	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	0.93	J	0.0491	5.34	ng/kg	JB	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	57117-31-4	2,3,4,7,8-PCDF	0.345	J	0.0365	5.34	ng/kg	JBQ	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	0.402	J	0.0363	5.34	ng/kg	JB	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	57117-44-9	1,2,3,6,7,8-HXCDF	0.382	J	0.0357	5.34	ng/kg	J	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	2.03	J	0.0521	5.34	ng/kg	JB	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	60851-34-5	2,3,4,6,7,8-HXCDF	0.626	J	0.0361	5.34	ng/kg	JB	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	10.8		0.0328	5.34	ng/kg	B			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.366	J	0.0386	5.34	ng/kg	JBQ	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	1613B	12/24/2013	PH148	6.4	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.34	U	0.0577	5.34	ng/kg	JBQ	U	B	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	1024-57-3	HEPTACHLOR EPOXIDE	0.93	U	0.93	0.93	ug/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	1031-07-8	ENDOSULFAN SULFATE	1.8	U	0.35	1.8	ug/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	2385-85-5	MIREX	1.8	U	0.37	1.8	ug/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	309-00-2	ALDRIN	0.88	U	0.18	0.88	ug/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	319-84-6	ALPHA-BHC	0.88	U	0.18	0.88	ug/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	319-85-7	BETA-BHC	2	U	1.0	2.0	ug/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	319-86-8	DELTA-BHC	0.74	J	0.48	0.88	ug/kg	J	J	Z	1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	33213-65-9	ENDOSULFAN II	1.8	U	0.35	1.8	ug/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	50-29-3	4,4'-DDT	2.3		0.37	1.8	ug/kg				1786699.659	270147.786	-118.706665	34.240281
SL-542-NBZ-SB-0.0-0.5	#####	N	0	0.5	ft	SO	NBZ_DG		7312459	LL	8081B	12/19/2013	PH148	6.4	1	53494-70-5	ENDRIN KETONE	1.9	U	0.64	1.9	ug/kg	U			1786699.659	270147.786	-118.706665	34.240281
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8082A	12/11/2013	PH138	5.4	1	12642-23-8	Aroclor 5442	35	U	11	35	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8082A	12/11/2013	PH138	5.4	1	12672-29-6	Aroclor 1248	18	U	3.5	18	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8082A	12/11/2013	PH138	5.4	1	12674-11-2	Aroclor 1016	18	U	3.5	18	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8082A	12/11/2013	PH138	5.4	1	37324-23-5	Aroclor 1262	18	U	3.5	18	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8082A	12/11/2013	PH138	5.4	1	53469-21-9	Aroclor 1242	18	U	4.3	18	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8082A	12/11/2013	PH138	5.4	1	63496-31-1	Aroclor 5432	35	U	11	35	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8270D SIM	12/27/2013	PH138	5.4	1	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	19	U	6.3	19	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8270D SIM	12/27/2013	PH138	5.4	1	117-84-0	Di-n-octylphthalate	19	U	6.3	19	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	7300112	LL	8270D SIM	12/27/2013	PH138	5.4	1	120-12-7	ANTHRACENE	1.8	U	0.35	1.8	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-809-NBZ-SB-2.5-3.5	12/3/2013	FD	2.5	3.5	ft	SO	NBZ_DG	SL-509-NBZ-SB-2.5-3.5	73																				



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	1613B	12/17/2013	PH139	5.6	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	4.26	J	0.0356	5.27	ng/kg	JB	J	Z	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	1613B	12/17/2013	PH139	5.6	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.27	U	0.0565	5.27	ng/kg	JBQ	U	B	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	1613B	12/17/2013	PH139	5.6	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.27	UJ	0.0558	5.27	ng/kg	JB	UJ	B, FD	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7429-90-5	ALUMINUM (FUME OR DUST)	11800		7.49	41.5	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7439-89-6	IRON	18000		3.76	41.5	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7439-92-1	LEAD	15.1		0.519	3.12	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7439-93-2	LITHIUM	22		0.35	4.2	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7439-95-4	MAGNESIUM	4070		1.73	10.4	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7439-96-5	MANGANESE	273		0.0862	1.04	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7439-98-7	MOLYBDENUM	2.08	UJ	0.177	2.08	mg/kg	J	UJ	F, FD, B	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-02-0	NICKEL	10.3		0.135	2.08	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-09-7	POTASSIUM	3070		8.66	104	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-23-5	SODIUM	92.1	J	17.3	104	mg/kg	J	J	Z	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-31-5	TIN	10.4	U	0.228	10.4	mg/kg	J	U	B	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-32-6	TITANIUM METAL POWDER	1010		0.177	1.04	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-36-0	ANTIMONY	4.15	UJ	0.769	4.15	mg/kg	U	UJ	Q	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-38-2	ARSENIC	2.9	J	0.727	4.15	mg/kg	J	J	Z	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-39-3	BARIUM	77.1		0.0343	1.04	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-41-7	BERYLLIUM	0.466	J	0.0696	1.04	mg/kg	J	J	Z	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-42-8	BORON	5.57	J	0.872	10.4	mg/kg	J	J	Z	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-43-9	CADMIUM	0.466	J	0.0789	1.04	mg/kg	J	J	Z	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-47-3	CHROMIUM	17.7		0.166	3.12	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-48-4	COBALT	4.62		0.103	1.04	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-50-8	COPPER	4.8		0.301	2.08	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-62-2	VANADIUM (FUME OR DUST)	29.6		0.135	1.04	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-66-6	ZINC	63.6		0.208	4.15	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-67-7	ZIRCONIUM	2	J	0.872	5.19	mg/kg	J	J	Z	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7440-70-2	CALCIUM METAL	5200		3.47	20.8	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6010C	12/16/2013	PH139	5.6	1	7723-14-0	PHOSPHORUS	372		3.00	10.4	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6020A	12/17/2013	PH139	5.6	2	7782-49-2	SELENIUM	0.189	J	0.104	0.415	mg/kg	J	J	Z	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6020A	12/17/2013	PH139	5.6	2	7440-22-4	SILVER	0.233		0.0270	0.208	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6020A	12/17/2013	PH139	5.6	2	7440-24-6	STRONTIUM	29.2	J	0.0706	0.415	mg/kg		J	Q	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	6020A	12/17/2013	PH139	5.6	2	7440-28-0	THALLIUM	0.208	U	0.0312	0.208	mg/kg	J	U	B	1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	7471B	12/17/2013	PH139	5.6	1	7439-97-6	MERCURY	0.284		0.0104	0.0173	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	8015M	12/13/2013	PH139	5.6	5	PHCC12C14	EFH (C12-C14)	26	U	11	26	mg/kg	U			1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	8015M	12/13/2013	PH139	5.6	5	PHCC15C20	EFH (C15-C20)	33		11	26	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	8015M	12/13/2013	PH139	5.6	5	PHCC21C30	EFH (C21-C30)	200		11	26	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	8015M	12/13/2013	PH139	5.6	5	PHCC30C40	EFH (C30-C40)	460		21	53	mg/kg				1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545-NBZ-SB-0.0-0.5	7301930	LL	8015M	12/13/2013	PH139	5.6	5	PHCC8C11	EFH (C8-C11)	26	U	11	26	mg/kg	U			1787238.443	269060.427	-118.704858	34.237303
SL-845-NBZ-SB-0.0-0.5	12/4/2013	FD	0	0.5	ft	SO	NBZ_DG	SL-545																					



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	4.98	U	0.0436	4.98	ng/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.996	U	0.0555	0.996	ng/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	4.98	U	0.0795	4.98	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	57117-31-4	2,3,4,7,8-PCDF	4.98	U	0.0329	4.98	ng/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	4.98	U	0.0322	4.98	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	57117-44-9	1,2,3,6,7,8-HXCDF	4.98	U	0.0527	4.98	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	4.98	U	0.0410	4.98	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	60851-34-5	2,3,4,6,7,8-HXCDF	4.98	U	0.0505	4.98	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	4.98	U	0.0511	4.98	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	70648-26-9	1,2,3,4,7,8-HXCDF	0.831	J	0.0586	4.98	ng/kg	JB	U	Z	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	1613B	12/14/2013	PH138	2.4	1	72918-21-9	1,2,3,7,8,9-HXCDF	4.98	U	0.0589	4.98	ng/kg	JB	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8015M	12/12/2013	PH138	2.4	1	PHCC12C14	EFH (C12-C14)	5.1	U	2.0	5.1	mg/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8015M	12/12/2013	PH138	2.4	1	PHCC15C20	EFH (C15-C20)	5.1	U	2.0	5.1	mg/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8015M	12/12/2013	PH138	2.4	1	PHCC21C30	EFH (C21-C30)	5.1	U	2.0	5.1	mg/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8015M	12/12/2013	PH138	2.4	1	PHCC30C40	EFH (C30-C40)	10	U	4.1	10	mg/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8015M	12/12/2013	PH138	2.4	1	PHCC8C11	EFH (C8-C11)	5.1	U	2.0	5.1	mg/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	1024-57-3	HEPTACHLOR EPOXIDE	0.85	U	0.17	0.85	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	1031-07-8	ENDOSULFAN SULFATE	1.7	U	0.34	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	2385-85-5	MIREX	1.7	U	0.36	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	309-00-2	ALDRIN	0.85	U	0.17	0.85	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	319-84-6	ALPHA-BHC	0.85	U	0.17	0.85	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	319-85-7	BETA-BHC	1.9	U	0.98	1.9	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	319-86-8	DELTA-BHC	0.85	U	0.46	0.85	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	33213-65-9	ENDOSULFAN II	1.7	U	0.34	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	50-29-3	4,4'-DDT	1.7	U	0.36	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	53494-70-5	ENDRIN KETONE	1.8	U	0.61	1.8	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	57-74-9	CHLORDANE	17	U	4.1	17	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	58-89-9	gamma-BHC (Lindane)	0.85	U	0.17	0.85	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	60-57-1	DIELDRIN	1.7	U	0.34	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	72-20-8	ENDRIN	1.7	U	0.34	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	72-43-5	Methoxychlor	6.9	U	1.7	6.9	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	72-54-8	4,4'-DDD	1.7	U	0.34	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	72-55-9	4,4'-DDE	1.7	U	0.34	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	7421-93-4	ENDRIN ALDEHYDE	1.7	U	0.34	1.7	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	76-44-8	HEPTACHLOR	0.85	U	0.17	0.85	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	8001-35-2	Toxaphene	34	U	14	34	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8081B	12/16/2013	PH138	2.4	1	959-98-8	ENDOSULFAN I	0.85	U	0.23	0.85	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8082A	12/11/2013	PH138	2.4	1	11096-82-5	Aroclor 1260	17	U	4.0	17	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8082A	12/11/2013	PH138	2.4	1	11097-69-1	Aroclor 1254	17	U	4.5	17	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8082A	12/11/2013	PH138	2.4	1	11100-14-4	Aroclor 1268	17	U	3.4	17	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8082A	12/11/2013	PH138	2.4	1	11104-28-2	Aroclor 1221	17	U	5.2	17	ug/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-0.0-0.5	12/3/2013	N	0	0.5	ft	SO	NBZ_DG		7300107	LL	8082A	12/11/2013	PH138	2.4	1	1112													



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	5.18	UJ	0.0719	5.18	ng/kg	JB	UJ	B, FD	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	39001-02-0	OCDF	10.4	U	0.0749	10.4	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.18	UJ	0.0468	5.18	ng/kg	JBQ	UJ	B, FD	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5.18	UJ	0.0416	5.18	ng/kg	U	UJ	FD	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	1.04	U	0.0460	1.04	ng/kg	U			1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5.18	UJ	0.0702	5.18	ng/kg	JBQ	UJ	B, FD	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	57117-31-4	2,3,4,7,8-PECDF	5.18	U	0.0217	5.18	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	57117-41-6	1,2,3,7,8-PENTACHLORODIBENZOFURAN	5.18	U	0.0215	5.18	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	57117-44-9	1,2,3,6,7,8-HXCDF	5.18	UJ	0.0347	5.18	ng/kg	U	UJ	FD	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	57653-85-7	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	5.18	UJ	0.0503	5.18	ng/kg	JBQ	UJ	B, FD	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	60851-34-5	2,3,4,6,7,8-HXCDF	5.18	UJ	0.0342	5.18	ng/kg	U	UJ	FD	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	67562-39-4	1,2,3,4,6,7,8-HPCDF	5.18	UJ	0.0466	5.18	ng/kg	JB	UJ	B, FD	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	70648-26-9	1,2,3,4,7,8-HXCDF	5.18	U	0.0383	5.18	ng/kg	JBQ	U	B	1781974.74	266794.341	-118.722219	34.230974
SL-509-NBZ-SB-2.5-3.5	12/3/2013	N	2.5	3.5	ft	SO	NBZ_DG		7300108	LL	1613B	12/14/2013	PH138	4.5	1	72918-21-9	1,2,3,7,8,9-HXCDF	5.18	UJ	0.0400	5.18	ng/kg	U	UJ	FD	1781974.74	266794.341	-118.722219	34.230974
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	2	7439-89-6	IRON	35200		7.41	81.8	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7429-90-5	ALUMINUM (FUME OR DUST)	23500		7.38	40.9	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7439-92-1	LEAD	15.5		0.512	3.07	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7439-93-2	LITHIUM	45.9		0.35	4.1	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7439-95-4	MAGNESIUM	5680		1.71	10.2	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7439-96-5	MANGANESE	370		0.0849	1.02	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7439-98-7	MOLYBDENUM	2.05	U	0.174	2.05	mg/kg	J	U	F, B	1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-02-0	NICKEL	15.8		0.133	2.05	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-09-7	POTASSIUM	4010		8.53	102	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-23-5	SODIUM	106		17.1	102	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-31-5	TIN	10.2	U	0.225	10.2	mg/kg	J	U	B	1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-32-6	TITANIUM METAL POWDER	1330		0.174	1.02	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-36-0	ANTIMONY	4.09	UJ	0.757	4.09	mg/kg	U	UJ	Q	1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-38-2	ARSENIC	28		0.716	4.09	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-39-3	BARIUM	106		0.0338	1.02	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-41-7	BERYLLIUM	1.18		0.0685	1.02	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-42-8	BORON	10.2	U	0.859	10.2	mg/kg	U			1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-43-9	CADMIUM	0.354	J	0.0778	1.02	mg/kg	J	J	Z	1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-47-3	CHROMIUM	21.1		0.164	3.07	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-48-4	COBALT	7.85		0.101	1.02	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-50-8	COPPER	8.84		0.297	2.05	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-62-2	VANADIUM (FUME OR DUST)	47		0.133	1.02	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-66-6	ZINC	82.1		0.205	4.09	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-67-7	ZIRCONIUM	1.34	J	0.859	5.12	mg/kg	J	J	Z	1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7440-70-2	CALCIUM METAL	3030		3.42	20.5	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6010C	12/16/2013	PH139	5.1	1	7723-14-0	PHOSPHORUS	359		2.96	10.2	mg/kg				1782865.109	266774.402	-118.719273	34.230937
SL-511-NBZ-SB-2.5-3.5	12/4/2013	N	2.5	3.5	ft	SO	NBZ_DG		7301932	LL	6020A	12/17/2013	PH139	5.1	2	7782-49-2	SELENIUM	0.402	J	0.102	0.409	mg/kg	J	J	Z	1782865.109	266774.402		



Master Chemical Database Table for Phase 3 - Northern Buffer Zone

Sample Name	Samle Date	Sample Type Code	Start Depth	End Depth	Depth Unit	Matrix Code	Task Code	Parent Sample Code	Lab Sample ID	Lab Name	Analytical Method	Analysis Date	Lab SDG	Percent Moisture	Dilution Factor	Cas RN	Chemical Name	Report Result Value	Final Qualifiers	Method Detection Limit	Reporting Detection Limit	Report Result Unit	Lab Qualifiers	DQM Qualifiers	DQM Remarks	X Coordinate	Y Coordinate	Longitude	Latitude
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7439-89-6	IRON	21500		3.57	39.5	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7439-92-1	LEAD	10.7		0.493	2.96	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7439-93-2	LITHIUM	29		0.34	3.9	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7439-95-4	MAGNESIUM	5500		1.65	9.87	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7439-96-5	MANGANESE	330		0.0819	0.987	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7439-98-7	MOLYBDENUM	1.97	U	0.168	1.97	mg/kg	J	U	F, B	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-02-0	NICKEL	11.2		0.128	1.97	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-09-7	POTASSIUM	3520		8.23	98.7	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-23-5	SODIUM	84.2	J	16.5	98.7	mg/kg	J	J	Z	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-31-5	TIN	9.87	U	0.217	9.87	mg/kg	J	U	B	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-32-6	TITANIUM METAL POWDER	1180		0.168	0.987	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-36-0	ANTIMONY	3.95	U	0.730	3.95	mg/kg	U			1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-38-2	ARSENIC	3.19	J	0.691	3.95	mg/kg	J	J	Z	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-39-3	BARIUM	87.6		0.0326	0.987	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-41-7	BERYLLIUM	0.496	J	0.0661	0.987	mg/kg	J	J	Z	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-42-8	BORON	9.87	U	0.829	9.87	mg/kg	U			1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-43-9	CADMIUM	0.425	J	0.0750	0.987	mg/kg	J	J	Z	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-47-3	CHROMIUM	17.8		0.158	2.96	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-48-4	COBALT	5.64		0.0977	0.987	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-50-8	COPPER	3.26		0.286	1.97	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-62-2	VANADIUM (FUME OR DUST)	36.4		0.128	0.987	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-66-6	ZINC	60.9		0.197	3.95	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-67-7	ZIRCONIUM	0.897	J	0.829	4.93	mg/kg	J	J	Z	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7440-70-2	CALCIUM METAL	2460		3.30	19.7	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6010C	12/16/2013	PH141	1.6	1	7723-14-0	PHOSPHORUS	472		2.85	9.87	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6020A	12/17/2013	PH141	1.6	2	7782-49-2	SELENIUM	0.104	J	0.0987	0.395	mg/kg	J	J	Z	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6020A	12/17/2013	PH141	1.6	2	7440-22-4	SILVER	0.0322	J	0.0257	0.197	mg/kg	J	J	Z	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6020A	12/17/2013	PH141	1.6	2	7440-24-6	STRONTIUM	14.7		0.0671	0.395	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	6020A	12/17/2013	PH141	1.6	2	7440-28-0	THALLIUM	0.238		0.0296	0.197	mg/kg				1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	7471B	12/17/2013	PH141	1.6	1	7439-97-6	MERCURY	0.0129	J	0.0099	0.0166	mg/kg	J	J	Z	1782287.848	266115.779	-118.721167	34.229116
SL-501-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305594	LL	9045M	12/7/2013	PH141	1.6	1	pH	PH	6.98		0.0100	0.0100	pH unit				1782287.848	266115.779	-118.721167	34.229116
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	160.3M	12/13/2013	PH141	2	1	MOIST	MOISTURE	2		0.10	0.10	%				1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	1746-01-6	2,3,7,8-TCDD	0.999	U	0.0394	0.999	ng/kg	U			1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	19408-74-3	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	5	U	0.0268	5.00	ng/kg	JBQ	U	B	1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	3268-87-9	OCDD	8.5	J	0.0279	9.99	ng/kg	JB	J	Z	1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	35822-46-9	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	5	U	0.0299	5.00	ng/kg	JB	U	B	1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	39001-02-0	OCDF	9.99	U	0.0339	9.99	ng/kg	JB	U	B	1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	39227-28-6	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	5	U	0.0280	5.00	ng/kg	JBQ	U	B	1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	40321-76-4	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	5	U	0.0294	5.00	ng/kg	JBQ	U	B	1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	51207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN	0.999	U	0.0439	0.999	ng/kg	JBQ	U	B	1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	55673-89-7	1,2,3,4,7,8,9-HPCDF	5	U	0.0217	5.00	ng/kg	JBQ	U	B	1782786.125	266444.131	-118.719526	34.230028
SL-512-NBZ-SB-0.0-0.5	12/6/2013	N	0	0.5	ft	SO	NBZ_DG		7305591	LL	1613B	12/17/2013	PH141	2	1	57117-31-4	2,3,4,7,8-PCCDF	5	U	0.0198	5.00								