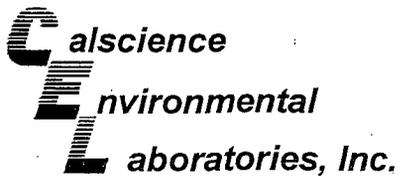


Port of Los Angeles
Berth 156 - Catalina Freight Bulkhead Wall Project
Port of Los Angeles
May 2007

Appendix E

Elutriate Chemistry Reports



February 27, 2007

Barry Snyder
AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Subject: **Calscience Work Order No.: 07-02-1051**
Client Reference: 4151001025 POLA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/15/2007 and analyzed in accordance with the attached chain-of-custody.

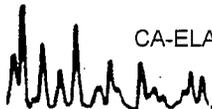
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Stearns", is written over a horizontal line.

Calscience Environmental
Laboratories, Inc.
Robert Stearns
Project Manager





CASE NARRATIVE

Calscience Work Order No.: 07-02-1051

Provided below is a narrative of our analytical effort, including any unique features or anomalies that were encountered as part of the analysis of the elutriate sample.

Sample Condition on Receipt

Two sediment samples, contained in plastic bags, were received for this project by the laboratory on February 8, 2007, following strict chain-of-custody procedures. The temperature of the sediment samples upon receipt at the laboratory was 3.8°C. The sediment samples were stored in refrigeration units pending analysis and elutriate preparation.

Water for the elutriate preparation was also received for this project on February 8, 2007. The water was received in two 5-gallon plastic pails with plastic liners. The pails were transferred to the laboratory following strict chain-of-custody (COC) procedures. The temperature of the water upon receipt at the laboratory was not recorded.

Following elutriate preparation, the filtered samples were logged into the LIMS, given laboratory identification numbers, and stored in refrigeration units pending analysis. Testing was performed in accordance with the chain-of-custody and project instructions.

No anomalies were found upon sample receipt

Elutriate Preparation

A representative aliquot of each sediment sample was combined (composited) for the elutriate procedure. The elutriate sample was prepared in accordance with the Dredging Elutriate Test (DRET) as established in the document Dredging Elutriate Test Development by DiGiano et al. (1995). In general, the DRET test involves mixing sediment and site water and aerating for one hour, allowing the sediment particles to settle for one hour, sampling the supernatant, and analyzing for chemical constituents. A site water sample was also prepared in accordance with the DRET procedure, and analyzed.

Data Summary

Holding times

All holding time requirements were met.

Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Blanks

Concentrations of target analytes in the method blanks were found to be below reporting limits for all testing.

Laboratory Control Samples

Laboratory Control Sample analyses were performed for each applicable method at the required frequencies. All parameter recoveries were within control limits for each method.

Matrix Spikes

Matrix spike analyses were performed for each applicable method at the required frequencies. Matrix spiking was performed on the project sample. All recoveries were within control limits with the following exceptions.

For the metals by EPA 6010B, the MS and/or MSD recoveries for chromium nickel, selenium, and zinc fell just above the established control limit for this metal. However, the associated LCS/LCSD for each metal were in control, suggesting a matrix interference effect, and the data is released with no further qualification.

For the SVOCs by EPA 8270C, the matrix spike recoveries were beyond control limits for many compounds. Also, the duplicate RPD for 2-Methylphenol, NDMA, and Phenol were outside control limits. However, like the metals, the associated LCS/LCSD and duplicate RPDs for each compound were in control, indicating a matrix interference effect, and the data is released with no further action.

Surrogates

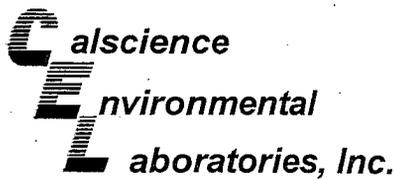
Surrogate recoveries for all applicable tests were within acceptable control limits.

Acronyms

MS/MSD: Matrix Spike/Matrix Spike Duplicate

LCS/LCSD: Laboratory Control Sample/Laboratory Control Sample Duplicate

RPD: Relative Percent Difference



Analytical Report



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3020A Total
Method: EPA 6020
Units: ug/L

Project: 4151001025 POLA

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
B155 Elutriate	07-02-1051-1	02/14/07	Aqueous	ICP/MS A	02/19/07	02/23/07	070219L02

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	ND	15.0	4.55	10		Nickel	0.713	2.00	0.394	10	J
Cadmium	ND	1.00	0.144	10		Selenium	ND	60.0	19.3	10	
Chromium	1.24	3.00	1.01	10	J	Silver	ND	1.00	0.164	10	
Copper	1.87	2.00	0.605	10	J	Zinc	30.5	40.0	13.0	10	J
Lead	ND	3.00	0.729	10							

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Site Water	07-02-1051-2	02/15/07	Aqueous	ICP/MS A	02/19/07	02/23/07	070219L02

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	ND	15.0	4.55	10		Nickel	1.51	2.00	0.394	10	J
Cadmium	ND	1.00	0.144	10		Selenium	ND	60.0	19.3	10	
Chromium	ND	3.00	1.01	10		Silver	0.954	1.00	0.164	10	J
Copper	1.08	2.00	0.605	10	J	Zinc	21.6	40.0	13.0	10	J
Lead	ND	3.00	0.729	10							

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	097-01-020-3	N/A	Aqueous	ICP/MS A	02/19/07	02/19/07	070219L02

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	ND	1.50	0.455	1		Nickel	ND	0.200	0.0394	1	
Cadmium	ND	0.100	0.0144	1		Selenium	ND	6.00	1.93	1	
Chromium	ND	0.300	0.101	1		Silver	ND	0.100	0.0164	1	
Copper	ND	0.200	0.0605	1		Zinc	ND	4.00	1.30	1	
Lead	ND	0.300	0.0729	1							

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers



Analytical Report



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 7470A Total
Method: EPA 7470A

Project: 4151001025 POLA

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
B155 Elutriate	07-02-1051-1	02/14/07	Aqueous	Mercury	02/16/07	02/16/07	070216L02

Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.200	1		ug/L

Site Water	07-02-1051-2	02/15/07	Aqueous	Mercury	02/16/07	02/16/07	070216L02
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.200	1		ug/L

Method Blank	099-12-457-17	N/A	Aqueous	Mercury	02/16/07	02/16/07	070216L02
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.200	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

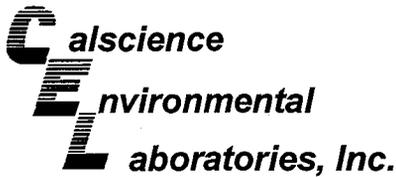
Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8081A/8082
Units: ug/L

Project: 4151001025 POLA

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID		
B155 Elutriate	07-02-1051-1	02/14/07	Aqueous	GC 16	02/16/07	02/18/07	070216L01		
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Alpha-BHC	ND	0.12	1.19		Endosulfan II	ND	0.12	1.19	
Gamma-BHC	ND	0.12	1.19		4,4'-DDT	ND	0.12	1.19	
Beta-BHC	ND	0.12	1.19		Endosulfan Sulfate	ND	0.12	1.19	
Heptachlor	ND	0.12	1.19		Methoxychlor	ND	0.12	1.19	
Delta-BHC	ND	0.12	1.19		Chlordane	ND	1.2	1.19	
Aldrin	ND	0.12	1.19		Toxaphene	ND	2.4	1.19	
Heptachlor Epoxide	ND	0.12	1.19		Endrin Ketone	ND	0.12	1.19	
Endosulfan I	ND	0.12	1.19		Aroclor-1016	ND	1.2	1.19	
Dieldrin	ND	0.12	1.19		Aroclor-1221	ND	1.2	1.19	
4,4'-DDE	ND	0.12	1.19		Aroclor-1232	ND	1.2	1.19	
Endrin	ND	0.12	1.19		Aroclor-1242	ND	1.2	1.19	
Endrin Aldehyde	ND	0.12	1.19		Aroclor-1248	ND	1.2	1.19	
4,4'-DDD	ND	0.12	1.19		Aroclor-1254	ND	1.2	1.19	
2,4'-DDD	ND	0.12	1.19		Aroclor-1260	ND	1.2	1.19	
2,4'-DDE	ND	0.12	1.19		Aroclor-1262	ND	1.2	1.19	
2,4'-DDT	ND	0.12	1.19						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
Decachlorobiphenyl	85	50-135			2,4,5,6-Tetrachloro-m-Xylene	59	50-135		
Site Water	07-02-1051-2	02/15/07	Aqueous	GC 16	02/16/07	02/18/07	070216L01		
<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>
Alpha-BHC	ND	0.12	1.25		Endosulfan II	ND	0.12	1.25	
Gamma-BHC	ND	0.12	1.25		4,4'-DDT	ND	0.12	1.25	
Beta-BHC	ND	0.12	1.25		Endosulfan Sulfate	ND	0.12	1.25	
Heptachlor	ND	0.12	1.25		Methoxychlor	ND	0.12	1.25	
Delta-BHC	ND	0.12	1.25		Chlordane	ND	1.2	1.25	
Aldrin	ND	0.12	1.25		Toxaphene	ND	2.5	1.25	
Heptachlor Epoxide	ND	0.12	1.25		Endrin Ketone	ND	0.12	1.25	
Endosulfan I	ND	0.12	1.25		Aroclor-1016	ND	1.2	1.25	
Dieldrin	ND	0.12	1.25		Aroclor-1221	ND	1.2	1.25	
4,4'-DDE	ND	0.12	1.25		Aroclor-1232	ND	1.2	1.25	
Endrin	ND	0.12	1.25		Aroclor-1242	ND	1.2	1.25	
Endrin Aldehyde	ND	0.12	1.25		Aroclor-1248	ND	1.2	1.25	
2,4'-DDD	ND	0.12	1.25		Aroclor-1254	ND	1.2	1.25	
2,4'-DDE	ND	0.12	1.25		Aroclor-1260	ND	1.2	1.25	
2,4'-DDT	ND	0.12	1.25		Aroclor-1262	ND	1.2	1.25	
4,4'-DDD	ND	0.12	1.25						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
Decachlorobiphenyl	100	50-135			2,4,5,6-Tetrachloro-m-Xylene	60	50-135		

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers



Analytical Report



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8081A/8082
Units: ug/L

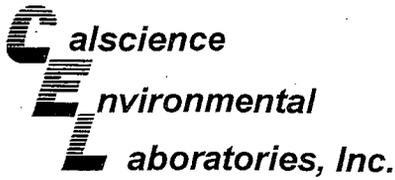
Project: 4151001025 POLA

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-07-031-10	N/A	Aqueous	GC 16	02/16/07	02/18/07	070216L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Alpha-BHC	ND	0.10	1		Endosulfan II	ND	0.10	1	
Gamma-BHC	ND	0.10	1		4,4'-DDT	ND	0.10	1	
Beta-BHC	ND	0.10	1		Endosulfan Sulfate	ND	0.10	1	
Heptachlor	ND	0.10	1		Methoxychlor	ND	0.10	1	
Delta-BHC	ND	0.10	1		Chlordane	ND	1.0	1	
Aldrin	ND	0.10	1		Toxaphene	ND	2.0	1	
Heptachlor Epoxide	ND	0.10	1		Endrin Ketone	ND	0.10	1	
Endosulfan I	ND	0.10	1		Aroclor-1016	ND	1.0	1	
Dieldrin	ND	0.10	1		Aroclor-1221	ND	1.0	1	
4,4'-DDE	ND	0.10	1		Aroclor-1232	ND	1.0	1	
Endrin	ND	0.10	1		Aroclor-1242	ND	1.0	1	
Endrin Aldehyde	ND	0.10	1		Aroclor-1248	ND	1.0	1	
4,4'-DDD	ND	0.10	1		Aroclor-1254	ND	1.0	1	
2,4'-DDD	ND	0.10	1		Aroclor-1260	ND	1.0	1	
2,4'-DDE	ND	0.10	1		Aroclor-1262	ND	1.0	1	
2,4'-DDT	ND	0.10	1						
Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual		
Decachlorobiphenyl	92	50-135		2,4,5,6-Tetrachloro-m-Xylene	85	50-135			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: Organotins by Krone et al.
Units: ng/L

Project: 4151001025 POLA

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
B155 Elutriate	07-02-1051-1	02/14/07	Aqueous	GC/MS Y	02/20/07	02/23/07	070220L05

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.6	1.2	1.21		Tetrabutyltin	ND	3.6	0.52	1.21	
Monobutyltin	ND	3.6	1.2	1.21		Tributyltin	ND	3.6	1.2	1.21	
Surrogates:	REC (%)	Control Limits			Qual						
Triphenyltin	75	50-130									

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Site Water	07-02-1051-2	02/15/07	Aqueous	GC/MS Y	02/20/07	02/23/07	070220L05

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

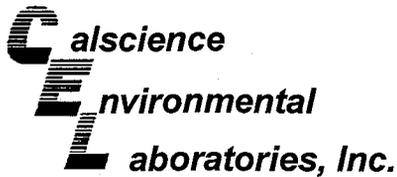
Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	4.1	1.3	1.37		Tetrabutyltin	ND	4.1	0.59	1.37	
Monobutyltin	ND	4.1	1.3	1.37		Tributyltin	ND	4.1	1.3	1.37	
Surrogates:	REC (%)	Control Limits			Qual						
Triphenyltin	73	50-130									

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-07-035-51	N/A	Aqueous	GC/MS Y	02/20/07	02/23/07	070220L05

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.0	0.98	1		Tetrabutyltin	ND	3.0	0.43	1	
Monobutyltin	ND	3.0	0.98	1		Tributyltin	ND	3.0	0.97	1	
Surrogates:	REC (%)	Control Limits			Qual						
Triphenyltin	125	50-130									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8270C SIM
Units: ug/L

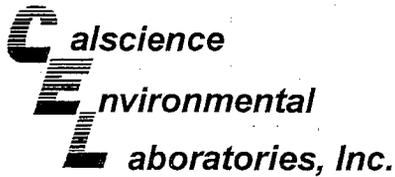
Project: 4151001025 POLA

Page 1 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
B155 Elutriate	07-02-1051-1	02/14/07	Aqueous	GC/MS N	02/16/07	02/22/07	070216L06

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	1.2	1.21		Benzo (g,h,i) Perylene	ND	1.2	1.21	
2,4,5-Trichlorophenol	ND	1.2	1.21		Benzo (k) Fluoranthene	ND	1.2	1.21	
2,4,6-Trichlorophenol	ND	1.2	1.21		Bis(2-Ethylhexyl) Phthalate	ND	1.2	1.21	
2,4-Dichlorophenol	ND	1.2	1.21		Butyl Benzyl Phthalate	ND	1.2	1.21	
2,4-Dimethylphenol	ND	1.2	1.21		Chrysene	ND	1.2	1.21	
2,4-Dinitrophenol	ND	12	1.21		Di-n-Butyl Phthalate	ND	1.2	1.21	
2-Chlorophenol	ND	1.2	1.21		Di-n-Octyl Phthalate	ND	1.2	1.21	
2-Methylnaphthalene	ND	1.2	1.21		Dibenz (a,h) Anthracene	ND	1.2	1.21	
2-Methylphenol	ND	1.2	1.21		Diethyl Phthalate	ND	1.2	1.21	
2-Nitrophenol	ND	1.2	1.21		Dimethyl Phthalate	ND	1.2	1.21	
3/4-Methylphenol	ND	1.2	1.21		Fluoranthene	ND	1.2	1.21	
4,6-Dinitro-2-Methylphenol	ND	12	1.21		Fluorene	ND	1.2	1.21	
4-Chloro-3-Methylphenol	ND	1.2	1.21		Indeno (1,2,3-c,d) Pyrene	ND	1.2	1.21	
4-Nitrophenol	ND	24	1.21		N-Nitrosodimethylamine	ND	1.2	1.21	
Acenaphthene	2.0	1.2	1.21		Naphthalene	3.0	1.2	1.21	
Acenaphthylene	ND	1.2	1.21		Pentachlorophenol	ND	12	1.21	
Anthracene	ND	1.2	1.21		Phenanthrene	ND	1.2	1.21	
Benzo (a) Anthracene	ND	1.2	1.21		Phenol	ND	1.2	1.21	
Benzo (a) Pyrene	ND	1.2	1.21		Pyrene	ND	1.2	1.21	
Benzo (b) Fluoranthene	ND	1.2	1.21						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		
2,4,6-Tribromophenol	101	24-152		2-Fluorobiphenyl	45	33-144			
2-Fluorophenol	65	31-142		Nitrobenzene-d5	110	28-139			
p-Terphenyl-d14	105	23-160		Phenol-d6	46	30-136			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8270C SIM
Units: ug/L

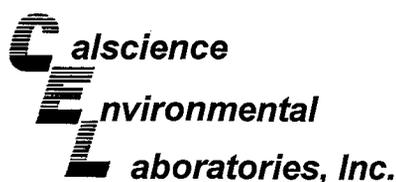
Project: 4151001025 POLA

Page 2 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Site Water	07-02-1051-2	02/15/07	Aqueous	GC/MS N	02/16/07	02/22/07	070216L06

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	1.2	1.17		Benzo (g,h,i) Perylene	ND	1.2	1.17	
2,4,5-Trichlorophenol	ND	1.2	1.17		Benzo (k) Fluoranthene	ND	1.2	1.17	
2,4,6-Trichlorophenol	ND	1.2	1.17		Bis(2-Ethylhexyl) Phthalate	ND	1.2	1.17	
2,4-Dichlorophenol	ND	1.2	1.17		Butyl Benzyl Phthalate	ND	1.2	1.17	
2,4-Dimethylphenol	ND	1.2	1.17		Chrysene	ND	1.2	1.17	
2,4-Dinitrophenol	ND	12	1.17		Di-n-Butyl Phthalate	ND	1.2	1.17	
2-Chlorophenol	ND	1.2	1.17		Di-n-Octyl Phthalate	ND	1.2	1.17	
2-Methylnaphthalene	ND	1.2	1.17		Dibenz (a,h) Anthracene	ND	1.2	1.17	
2-Methylphenol	ND	1.2	1.17		Diethyl Phthalate	ND	1.2	1.17	
2-Nitrophenol	ND	1.2	1.17		Dimethyl Phthalate	ND	1.2	1.17	
3/4-Methylphenol	ND	1.2	1.17		Fluoranthene	ND	1.2	1.17	
4,6-Dinitro-2-Methylphenol	ND	12	1.17		Fluorene	ND	1.2	1.17	
4-Chloro-3-Methylphenol	ND	1.2	1.17		Indeno (1,2,3-c,d) Pyrene	ND	1.2	1.17	
4-Nitrophenol	ND	23	1.17		N-Nitrosodimethylamine	ND	1.2	1.17	
Acenaphthene	ND	1.2	1.17		Naphthalene	ND	1.2	1.17	
Acenaphthylene	ND	1.2	1.17		Pentachlorophenol	ND	12	1.17	
Anthracene	ND	1.2	1.17		Phenanthrene	ND	1.2	1.17	
Benzo (a) Anthracene	ND	1.2	1.17		Phenol	ND	1.2	1.17	
Benzo (a) Pyrene	ND	1.2	1.17		Pyrene	ND	1.2	1.17	
Benzo (b) Fluoranthene	ND	1.2	1.17						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		
2,4,6-Tribromophenol	94	24-152		2-Fluorobiphenyl	50	33-144			
2-Fluorophenol	63	31-142		Nitrobenzene-d5	112	28-139			
p-Terphenyl-d14	109	23-160		Phenol-d6	42	30-136			

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers



Analytical Report



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8270C SIM
Units: ug/L

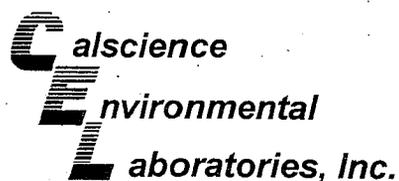
Project: 4151001025 POLA

Page 3 of 3

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-12-430-13	N/A	Aqueous	GC/MS N	02/16/07	02/21/07	070216L06

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	1.0	1		Benzo (g,h,i) Perylene	ND	1.0	1	
2,4,5-Trichlorophenol	ND	1.0	1		Benzo (k) Fluoranthene	ND	1.0	1	
2,4,6-Trichlorophenol	ND	1.0	1		Bis(2-Ethylhexyl) Phthalate	ND	1.0	1	
2,4-Dichlorophenol	ND	1.0	1		Butyl Benzyl Phthalate	ND	1.0	1	
2,4-Dimethylphenol	ND	1.0	1		Chrysene	ND	1.0	1	
2,4-Dinitrophenol	ND	10	1		Di-n-Butyl Phthalate	ND	1.0	1	
2-Chlorophenol	ND	1.0	1		Di-n-Octyl Phthalate	ND	1.0	1	
2-Methylnaphthalene	ND	1.0	1		Dibenz (a,h) Anthracene	ND	1.0	1	
2-Methylphenol	ND	1.0	1		Diethyl Phthalate	ND	1.0	1	
2-Nitrophenol	ND	1.0	1		Dimethyl Phthalate	ND	1.0	1	
3/4-Methylphenol	ND	1.0	1		Fluoranthene	ND	1.0	1	
4,6-Dinitro-2-Methylphenol	ND	10	1		Fluorene	ND	1.0	1	
4-Chloro-3-Methylphenol	ND	1.0	1		Indeno (1,2,3-c,d) Pyrene	ND	1.0	1	
4-Nitrophenol	ND	20	1		N-Nitrosodimethylamine	ND	1.0	1	
Acenaphthene	ND	1.0	1		Naphthalene	ND	1.0	1	
Acenaphthylene	ND	1.0	1		Pentachlorophenol	ND	10	1	
Anthracene	ND	1.0	1		Phenanthrene	ND	1.0	1	
Benzo (a) Anthracene	ND	1.0	1		Phenol	ND	1.0	1	
Benzo (a) Pyrene	ND	1.0	1		Pyrene	ND	1.0	1	
Benzo (b) Fluoranthene	ND	1.0	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		
2,4,6-Tribromophenol	64	24-152		2-Fluorobiphenyl	95	33-144			
2-Fluorophenol	93	31-142		Nitrobenzene-d5	113	28-139			
p-Terphenyl-d14	114	23-160		Phenol-d6	93	30-136			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



AMEC
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San Diego, CA 92123-4302

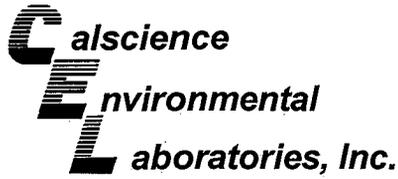
Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3020A Total
Method: EPA 6020

Project 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B155 Elutriate	Aqueous	ICP/MS A	02/19/07	02/20/07	070219S02

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Arsenic	108	102	80-120	5	0-20	
Cadmium	119	114	80-120	4	0-20	
Chromium	131	123	80-120	6	0-20	3
Copper	116	111	80-120	4	0-20	
Lead	113	105	80-120	8	0-20	
Nickel	131	123	80-120	7	0-20	3
Selenium	117	121	80-120	3	0-20	3
Silver	110	111	80-120	1	0-20	
Zinc	127	114	80-120	11	0-20	3

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



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San Diego, CA 92123-4302

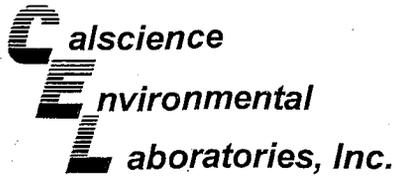
Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 7470A Total
Method: EPA 7470A

Project 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B155 Elutriate	Aqueous	Mercury	02/16/07	02/16/07	070216S02

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	83	84	71-134	1	0-14	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



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San Diego, CA 92123-4302

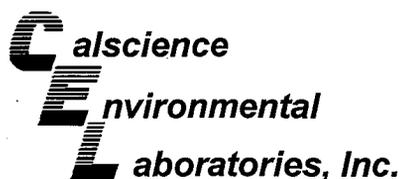
Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8081A/8082

Project 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B155 Elutriate	Aqueous	GC 16	02/16/07	02/18/07	070216S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	81	84	50-135	5	0-25	
Heptachlor	74	77	50-135	5	0-25	
Endosulfan I	76	75	50-135	2	0-25	
Dieldrin	90	92	50-135	4	0-25	
Endrin	83	83	50-135	1	0-25	
4,4'-DDT	88	83	50-135	4	0-25	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



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San Diego, CA 92123-4302

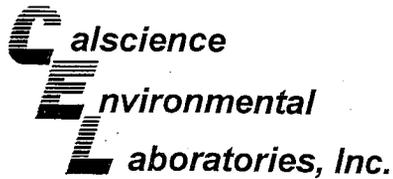
Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: Organotins by Krone et al.

Project 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B155 Elutriate	Aqueous	GC/MS Y	02/20/07	02/23/07	070220S05

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	64	72	50-130	12	0-20	
Tributyltin	101	103	50-130	2	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



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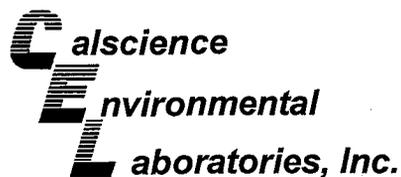
Date Received: 02/15/07
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8270C SIM

Project 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
B155 Elutriate	Aqueous	GC/MS N	02/16/07	02/22/07	070216S06

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
2,4,5-Trichlorophenol	18	17	40-160	6	0-20	3
2,4-Dichlorophenol	20	18	40-160	10	0-20	3
2-Methylphenol	36	26	40-160	30	0-20	3,4
2-Nitrophenol	24	21	40-160	11	0-20	3
4-Chloro-3-Methylphenol	23	21	40-160	10	0-20	3
Acenaphthene	848	792	49-121	6	0-20	3
Benzo (a) Pyrene	57	55	40-160	3	0-20	
Chrysene	52	51	40-160	2	0-20	
Di-n-Butyl Phthalate	22	22	40-160	3	0-20	3
Dimethyl Phthalate	22	21	40-160	5	0-20	3
Fluoranthene	57	55	40-160	4	0-20	
Fluorene	54	51	40-160	6	0-20	
N-Nitrosodimethylamine	20	15	40-160	27	0-20	3,4
Naphthalene	40	36	40-160	8	0-20	3
Phenanthrene	52	50	40-160	4	0-20	
Phenol	18	14	40-160	27	0-20	3,4
Pyrene	1128	1100	18-168	2	0-22	3

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



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San Diego, CA 92123-4302

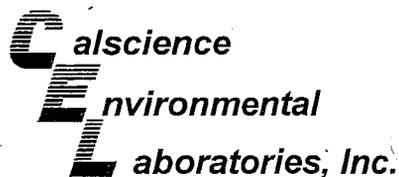
Date Received: N/A
Work Order No: 07-02-1051
Preparation: EPA 3020A Total
Method: EPA 6020

Project: 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-020-3	Aqueous	ICP/MS A	02/19/07	02/19/07	070219L02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	100	104	80-120	4	0-20	
Cadmium	104	107	80-120	3	0-20	
Chromium	102	104	80-120	2	0-20	
Copper	95	99	80-120	4	0-20	
Lead	103	106	80-120	3	0-20	
Nickel	98	102	80-120	3	0-20	
Selenium	95	100	80-120	5	0-20	
Silver	106	106	80-120	0	0-20	
Zinc	104	108	80-120	3	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



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9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

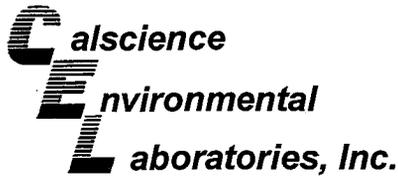
Date Received: N/A
Work Order No: 07-02-1051
Preparation: EPA 7470A Total
Method: EPA 7470A

Project: 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-17	Aqueous	Mercury	02/16/07	02/16/07	070216L02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	107	106	90-122	1	0-14	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



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San Diego, CA 92123-4302

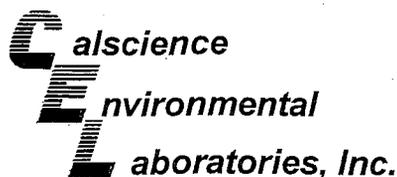
Date Received: N/A
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8081A/8082

Project: 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-031-10	Aqueous	GC 16	02/16/07	02/17/07	070216L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	86	93	50-135	8	0-25	
Heptachlor	90	109	50-135	18	0-25	
Endosulfan I	90	98	50-135	8	0-25	
Dieldrin	94	98	50-135	5	0-25	
Endrin	77	74	50-135	3	0-25	
4,4'-DDT	95	99	50-135	4	0-25	
Aroclor-1260	96	102	50-135	6	0-25	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

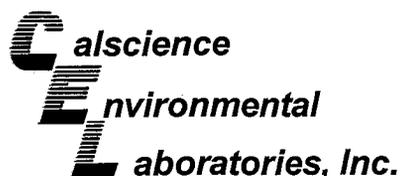
Date Received: N/A
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: Organotins by Krone et al.

Project: 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-035-51	Aqueous	GC/MS Y	02/20/07	02/23/07	070220L05

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	73	78	50-130	6	0-20	
Tributyltin	109	115	50-130	6	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123-4302

Date Received: N/A
Work Order No: 07-02-1051
Preparation: EPA 3510B
Method: EPA 8270C SIM

Project: 4151001025 POLA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-430-13	Aqueous	GC/MS N	02/16/07	02/21/07	070216L06

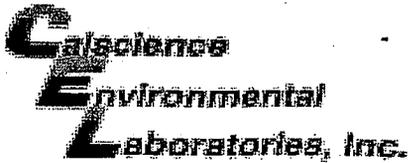
Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
2,4,5-Trichlorophenol	86	88	40-160	2	0-20	
2,4-Dichlorophenol	91	92	40-160	1	0-20	
2-Methylphenol	105	103	40-160	2	0-20	
2-Nitrophenol	86	105	40-160	20	0-20	
4-Chloro-3-Methylphenol	108	110	40-160	2	0-20	
Acenaphthene	106	106	55-121	0	0-15	
Benzo (a) Pyrene	113	115	17-163	1	0-20	
Chrysene	105	105	17-168	0	0-20	
Di-n-Butyl Phthalate	115	112	40-160	3	0-20	
Dimethyl Phthalate	110	109	40-160	1	0-20	
Fluoranthene	113	114	26-137	1	0-20	
Fluorene	108	109	59-121	1	0-20	
N-Nitrosodimethylamine	104	108	40-160	4	0-20	
Naphthalene	102	102	21-133	1	0-20	
Phenanthrene	102	104	54-120	2	0-20	
Phenol	94	93	40-160	1	0-20	
Pyrene	116	111	45-129	4	0-15	

RPD - Relative Percent Difference , CL - Control Limit



Work Order Number: 07-02-1051

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



WORK ORDER #: **07** - -

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: AMEC

DATE: 02.15.07

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
- Chilled, cooler without temperature blank.
- Chilled and placed in cooler with wet ice.
- Ambient and placed in cooler with wet ice.
- Ambient temperature.
- °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- °C Temperature blank.
- 4.0 °C IR thermometer.
- Ambient temperature.

Initial: _____

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present:

Initial: _____

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with custody papers.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers and volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on sample label(s).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOA vial(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial: _____

COMMENTS:



March 16, 2007

Kevin Sommelet
Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Subject: **Calscience Work Order No.:** 07-03-0512
Client Reference: POLA_B155

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/8/2007 and analyzed in accordance with the attached chain-of-custody.

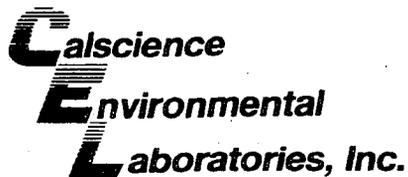
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Torres for".

Calscience Environmental
Laboratories, Inc.
Jason Torres
Project Manager



CASE NARRATIVE

Calscience Work Order No.: 07-03-0512

Provided below is a narrative of our analytical effort, including any unique features or anomalies that were encountered as part of the analysis of the elutriate sample.

Sample Condition on Receipt

Two sediment samples, contained in glass jars, were received for this project by the laboratory on March 1, 2007, following strict chain-of-custody (COC) procedures. The temperature of the sediment samples upon receipt at the laboratory was 3.8°C. The sediment samples were stored in refrigeration units pending analysis and elutriate preparation.

Water for the elutriate preparation was also received for this project on February 8, 2007 under a different COC. The water was received in two 5-gallon plastic pails with plastic liners. The pails were transferred to the laboratory following strict chain-of-custody (COC) procedures. The temperature of the water upon receipt at the laboratory was not recorded.

Following elutriate preparation, the filtered samples were logged into the LIMS, given laboratory identification numbers, and stored in refrigeration units pending analysis. Testing was performed in accordance with the chain-of-custody and project instructions.

No anomalies were found upon sample receipt

Elutriate Preparation

A representative aliquot of each sediment sample was combined (composited) for the elutriate procedure. The elutriate sample was prepared in accordance with the Dredging Elutriate Test (DRET) as established in the document Dredging Elutriate Test Development by DiGiano et al. (1995). In general, the DRET test involves mixing sediment and site water and aerating for one hour, allowing the sediment particles to settle for one hour, centrifuging and/or filtering the supernatant, sampling the supernatant, and analyzing for chemical constituents. A site water sample was also prepared in accordance with the DRET procedure, and analyzed as part of Calscience Work Order No. 07-02-1051

Data Summary

Holding times

All holding time requirements were met.

Calibration

Frequency and control criteria for initial and continuing calibration verifications were met.

Blanks

Concentrations of target analytes in the method blanks were found to be below reporting limits for all testing, with the exception of arsenic. For arsenic, a trace amount was found in the method blank, at a concentration just above the MDL. However, arsenic was not detected in the sample, so the issue is moot.

Laboratory Control Samples

Laboratory Control Sample analyses were performed for each applicable method at the required frequencies. All parameter recoveries were within control limits for each method.

Matrix Spikes

Matrix spike analyses were not performed for each applicable method due to limited available site water. Matrix spike information is provided herein only for metals. Matrix spiking was performed on a project sample as part of Calscience Work Order 07-02-1051. All recoveries were within control limits for the metals testing performed as part of this Work Order. Please refer to the aforementioned Work Order for additional matrix spike recovery information for project samples.

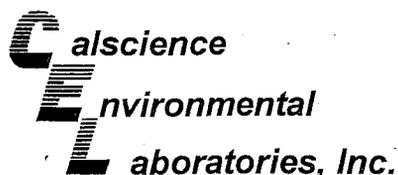
Surrogates

Surrogate recoveries for all applicable tests were within acceptable control limits.

Acronyms

MS/MSD: Matrix Spike/Matrix Spike Duplicate
LCS/LCSD: Laboratory Control Sample/Laboratory Control Sample Duplicate
RPD: Relative Percent Difference





Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 03/08/07
Work Order No: 07-03-0512
Preparation: EPA 3020A Total
Method: EPA 6020
Units: ug/L
Page 1 of 1

Project: POLA_B155

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Tt-B155 Elutriate	07-03-0512-1	03/08/07	Aqueous	ICP/MS A	03/12/07	03/12/07	070312L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

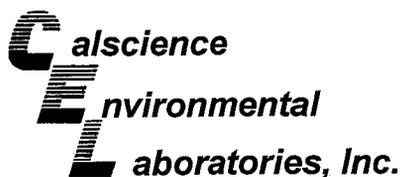
Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	ND	15.0	4.55	10		Nickel	1.78	2.00	0.394	10	J
Cadmium	ND	1.00	0.144	10		Selenium	ND	60.0	19.3	10	
Chromium	1.94	3.00	1.01	10	J	Silver	0.187	1.00	0.164	10	J
Copper	3.09	2.00	0.605	10		Zinc	89.6	40.0	13.0	10	
Lead	ND	3.00	0.729	10							

Method Blank	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
	097-01-020-5	N/A	Aqueous	ICP/MS A	03/12/07	03/12/07	070312L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Arsenic	0.489	1.50	0.455	1	J	Nickel	ND	0.200	0.0394	1	
Cadmium	ND	0.100	0.0144	1		Selenium	ND	6.00	1.93	1	
Chromium	ND	0.300	0.101	1		Silver	ND	0.100	0.0164	1	
Copper	ND	0.200	0.0605	1		Zinc	ND	4.00	1.30	1	
Lead	ND	0.300	0.0729	1							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 03/08/07
Work Order No: 07-03-0512
Preparation: EPA 7470A Total
Method: EPA 7470A

Project: POLA_B155

Page 1 of 1

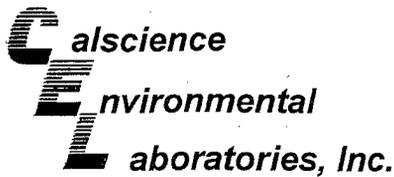
Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Tt-B155 Elutriate	07-03-0512-1	03/08/07	Aqueous	Mercury	03/09/07	03/09/07	070309L01

Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.200	1		ug/L

Method Blank	099-12-457-20	N/A	Aqueous	Mercury	03/09/07	03/09/07	070309L01
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Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.200	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 03/08/07
Work Order No: 07-03-0512
Preparation: EPA 3510B
Method: EPA 8081A/8082
Units: ug/L

Project: POLA_B155

Page 1 of 1

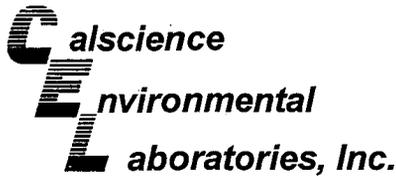
Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Tt-B155 Elutriate	07-03-0512-1	03/08/07	Aqueous	GC 16	03/08/07	03/13/07	070308L05D

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Alpha-BHC	ND	0.10	1		Endosulfan II	ND	0.10	1	
Gamma-BHC	ND	0.10	1		4,4'-DDT	ND	0.10	1	
Beta-BHC	ND	0.10	1		Endosulfan Sulfate	ND	0.10	1	
Heptachlor	ND	0.10	1		Methoxychlor	ND	0.10	1	
Delta-BHC	ND	0.10	1		Chlordane	ND	1.0	1	
Aldrin	ND	0.10	1		Toxaphene	ND	2.0	1	
Heptachlor Epoxide	ND	0.10	1		Endrin Ketone	ND	0.10	1	
Endosulfan I	ND	0.10	1		Aroclor-1016	ND	1.0	1	
Dieldrin	ND	0.10	1		Aroclor-1221	ND	1.0	1	
4,4'-DDE	ND	0.10	1		Aroclor-1232	ND	1.0	1	
Endrin	ND	0.10	1		Aroclor-1242	ND	1.0	1	
Endrin Aldehyde	ND	0.10	1		Aroclor-1248	ND	1.0	1	
2,4'-DDD	ND	0.10	1		Aroclor-1254	ND	1.0	1	
2,4'-DDE	ND	0.10	1		Aroclor-1260	ND	1.0	1	
2,4'-DDT	ND	0.10	1		Aroclor-1262	ND	1.0	1	
4,4'-DDD	ND	0.10	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	84	50-135			2,4,5,6-Tetrachloro-m-Xylene	77	50-135		

Method Blank	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
	099-07-031-11	N/A	Aqueous	GC 16	03/08/07	03/12/07	070308L05D

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Alpha-BHC	ND	0.10	1		Endosulfan II	ND	0.10	1	
Gamma-BHC	ND	0.10	1		4,4'-DDT	ND	0.10	1	
Beta-BHC	ND	0.10	1		Endosulfan Sulfate	ND	0.10	1	
Heptachlor	ND	0.10	1		Methoxychlor	ND	0.10	1	
Delta-BHC	ND	0.10	1		Chlordane	ND	1.0	1	
Aldrin	ND	0.10	1		Toxaphene	ND	2.0	1	
Heptachlor Epoxide	ND	0.10	1		Endrin Ketone	ND	0.10	1	
Endosulfan I	ND	0.10	1		Aroclor-1016	ND	1.0	1	
Dieldrin	ND	0.10	1		Aroclor-1221	ND	1.0	1	
4,4'-DDE	ND	0.10	1		Aroclor-1232	ND	1.0	1	
Endrin	ND	0.10	1		Aroclor-1242	ND	1.0	1	
Endrin Aldehyde	ND	0.10	1		Aroclor-1248	ND	1.0	1	
4,4'-DDD	ND	0.10	1		Aroclor-1254	ND	1.0	1	
2,4'-DDD	ND	0.10	1		Aroclor-1260	ND	1.0	1	
2,4'-DDE	ND	0.10	1		Aroclor-1262	ND	1.0	1	
2,4'-DDT	ND	0.10	1						
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Decachlorobiphenyl	94	50-135			2,4,5,6-Tetrachloro-m-Xylene	85	50-135		

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 03/08/07
Work Order No: 07-03-0512
Preparation: EPA 3510B
Method: Organotins by Krone et al.
Units: ng/L

Project: POLA_B155

Page 1 of 1

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Tt-B155 Elutriate	07-03-0512-1	03/08/07	Aqueous	GC/MS Y	03/13/07	03/14/07	070313L10

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

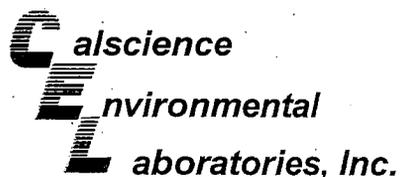
Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.0	0.98	1		Tetrabutyltin	ND	3.0	0.43	1	
Monobutyltin	ND	3.0	0.98	1		Tributyltin	ND	3.0	0.97	1	
Surrogates:	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>						
Triphenyltin	120	50-130									

Method Blank	099-07-035-53	N/A	Aqueous	GC/MS Y	03/13/07	03/14/07	070313L10
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Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.0	0.98	1		Tetrabutyltin	ND	3.0	0.43	1	
Monobutyltin	ND	3.0	0.98	1		Tributyltin	ND	3.0	0.97	1	
Surrogates:	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>						
Triphenyltin	124	50-130									

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 03/08/07
Work Order No: 07-03-0512
Preparation: EPA 3510B
Method: EPA 8270C SIM
Units: ug/L

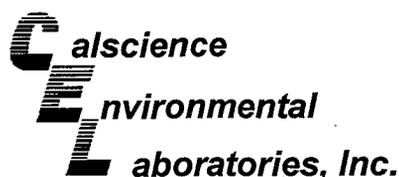
Project: POLA_B155

Page 1 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Tt-B155 Elutriate	07-03-0512-1	03/08/07	Aqueous	GC/MS N	03/13/07	03/14/07	070313L08

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	1.0	1		Benzo (g,h,i) Perylene	ND	1.0	1	
2,4,5-Trichlorophenol	ND	1.0	1		Benzo (k) Fluoranthene	ND	1.0	1	
2,4,6-Trichlorophenol	ND	1.0	1		Bis(2-Ethylhexyl) Phthalate	ND	1.0	1	
2,4-Dichlorophenol	ND	1.0	1		Butyl Benzyl Phthalate	ND	1.0	1	
2,4-Dimethylphenol	ND	1.0	1		Chrysene	ND	1.0	1	
2,4-Dinitrophenol	ND	10	1		Di-n-Butyl Phthalate	ND	1.0	1	
2-Chlorophenol	ND	1.0	1		Di-n-Octyl Phthalate	ND	1.0	1	
2-Methylnaphthalene	ND	1.0	1		Dibenz (a,h) Anthracene	ND	1.0	1	
2-Methylphenol	ND	1.0	1		Diethyl Phthalate	ND	1.0	1	
2-Nitrophenol	ND	1.0	1		Dimethyl Phthalate	ND	1.0	1	
3/4-Methylphenol	ND	1.0	1		Fluoranthene	ND	1.0	1	
4,6-Dinitro-2-Methylphenol	ND	10	1		Fluorene	ND	1.0	1	
4-Chloro-3-Methylphenol	ND	1.0	1		Indeno (1,2,3-c,d) Pyrene	ND	1.0	1	
4-Nitrophenol	ND	20	1		N-Nitrosodimethylamine	ND	1.0	1	
Acenaphthene	ND	1.0	1		Naphthalene	ND	1.0	1	
Acenaphthylene	ND	1.0	1		Pentachlorophenol	ND	10	1	
Anthracene	ND	1.0	1		Phenanthrene	ND	1.0	1	
Benzo (a) Anthracene	ND	1.0	1		Phenol	ND	1.0	1	
Benzo (a) Pyrene	ND	1.0	1		Pyrene	ND	1.0	1	
Benzo (b) Fluoranthene	ND	1.0	1						
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		
2,4,6-Tribromophenol	88	24-152		2-Fluorobiphenyl	55	33-144			
2-Fluorophenol	61	31-142		Nitrobenzene-d5	98	28-139			
p-Terphenyl-d14	115	23-160		Phenol-d6	46	30-136			

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers



Analytical Report



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: 03/08/07
Work Order No: 07-03-0512
Preparation: EPA 3510B
Method: EPA 8270C SIM
Units: ug/L

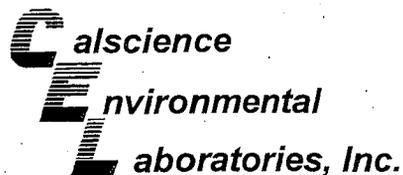
Project: POLA_B155

Page 2 of 2

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-12-430-18	N/A	Aqueous	GC/MS N	03/13/07	03/14/07	070313L08

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	1.0	1		Benzo (g,h,i) Perylene	ND	1.0	1	
2,4,5-Trichlorophenol	ND	1.0	1		Benzo (k) Fluoranthene	ND	1.0	1	
2,4,6-Trichlorophenol	ND	1.0	1		Bis(2-Ethylhexyl) Phthalate	ND	1.0	1	
2,4-Dichlorophenol	ND	1.0	1		Butyl Benzyl Phthalate	ND	1.0	1	
2,4-Dimethylphenol	ND	1.0	1		Chrysene	ND	1.0	1	
2,4-Dinitrophenol	ND	10	1		Di-n-Butyl Phthalate	ND	1.0	1	
2-Chlorophenol	ND	1.0	1		Di-n-Octyl Phthalate	ND	1.0	1	
2-Methylnaphthalene	ND	1.0	1		Dibenz (a,h) Anthracene	ND	1.0	1	
2-Methylphenol	ND	1.0	1		Diethyl Phthalate	ND	1.0	1	
2-Nitrophenol	ND	1.0	1		Dimethyl Phthalate	ND	1.0	1	
3/4-Methylphenol	ND	1.0	1		Fluoranthene	ND	1.0	1	
4,6-Dinitro-2-Methylphenol	ND	10	1		Fluorene	ND	1.0	1	
4-Chloro-3-Methylphenol	ND	1.0	1		Indeno (1,2,3-c,d) Pyrene	ND	1.0	1	
4-Nitrophenol	ND	20	1		N-Nitrosodimethylamine	ND	1.0	1	
Acenaphthene	ND	1.0	1		Naphthalene	ND	1.0	1	
Acenaphthylene	ND	1.0	1		Pentachlorophenol	ND	10	1	
Anthracene	ND	1.0	1		Phenanthrene	ND	1.0	1	
Benzo (a) Anthracene	ND	1.0	1		Phenol	ND	1.0	1	
Benzo (a) Pyrene	ND	1.0	1		Pyrene	ND	1.0	1	
Benzo (b) Fluoranthene	ND	1.0	1						
Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual		
2,4,6-Tribromophenol	67	24-152		2-Fluorobiphenyl	51	33-144			
2-Fluorophenol	54	31-142		Nitrobenzene-d5	96	28-139			
p-Terphenyl-d14	107	23-160		Phenol-d6	38	30-136			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

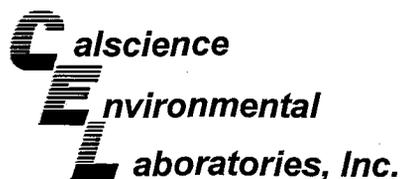
Date Received: 03/08/07
Work Order No: 07-03-0512
Preparation: EPA 3020A Total
Method: EPA 6020

Project POLA_B155

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
07-03-0634-1	Aqueous	ICP/MS A	03/12/07	03/12/07	070312S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	109	111	80-120	1	0-20	
Cadmium	105	111	80-120	5	0-20	
Chromium	105	102	80-120	2	0-20	
Copper	101	102	80-120	1	0-20	
Lead	102	112	80-120	9	0-20	
Nickel	107	104	80-120	2	0-20	
Selenium	102	94	80-120	8	0-20	
Silver	116	119	80-120	3	0-20	
Zinc	104	111	80-120	5	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

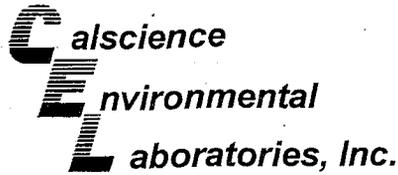
Date Received: 03/08/07
Work Order No: 07-03-0512
Preparation: EPA 7470A Total
Method: EPA 7470A

Project POLA_B155

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Tt-B155 Elutriate	Aqueous	Mercury	03/09/07	03/09/07	070309S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	100	100	71-134	0	0-14	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

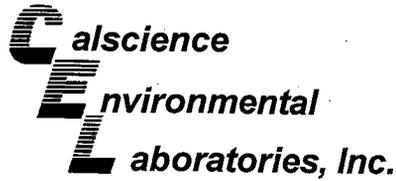
Date Received: N/A
Work Order No: 07-03-0512
Preparation: EPA 3020A Total
Method: EPA 6020

Project: POLA_B155

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-020-5	Aqueous	ICP/MS A	03/12/07	03/12/07	070312L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	102	102	80-120	.0	0-20	
Cadmium	104	104	80-120	0	0-20	
Chromium	104	104	80-120	0	0-20	
Copper	97	98	80-120	1	0-20	
Lead	103	104	80-120	2	0-20	
Nickel	100	102	80-120	2	0-20	
Selenium	101	101	80-120	0	0-20	
Silver	106	107	80-120	1	0-20	
Zinc	108	108	80-120	0	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

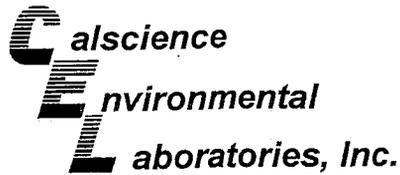
Date Received: N/A
Work Order No: 07-03-0512
Preparation: EPA 7470A Total
Method: EPA 7470A

Project: POLA_B155

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-20	Aqueous	Mercury	03/09/07	03/09/07	070309L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	104	104	90-122	0	0-14	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

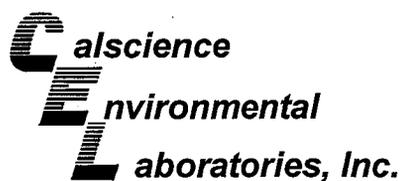
Date Received: N/A
Work Order No: 07-03-0512
Preparation: EPA 3510B
Method: EPA 8081A/8082

Project: POLA_B155

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-031-11	Aqueous	GC 16	03/08/07	03/12/07	070308L05D

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gamma-BHC	96	100	50-135	4	0-25	
Heptachlor	77	78	50-135	1	0-25	
Endosulfan I	84	88	50-135	4	0-25	
Dieldrin	84	91	50-135	8	0-25	
Endrin	94	94	50-135	0	0-25	
4,4'-DDT	88	91	50-135	4	0-25	
Aroclor-1260	85	76	50-135	12	0-25	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
 3475 East Foothill Blvd., Suite 300
 Pasadena, CA 91107-6024

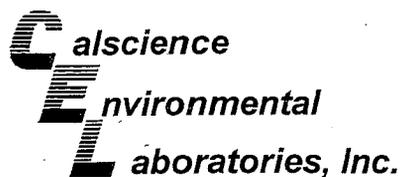
Date Received: N/A
 Work Order No: 07-03-0512
 Preparation: EPA 3510B
 Method: Organotins by Krone et al.

Project: POLA_B155

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-035-53	Aqueous	GC/MS Y	03/13/07	03/14/07	070313L10

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	69	73	50-130	6	0-20	
Tributyltin	101	109	50-130	7	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



Tetra Tech, Inc.
3475 East Foothill Blvd., Suite 300
Pasadena, CA 91107-6024

Date Received: N/A
Work Order No: 07-03-0512
Preparation: EPA 3510B
Method: EPA 8270C SIM

Project: POLA_B155

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-430-18	Aqueous	GC/MS N	03/13/07	03/14/07	070313L08

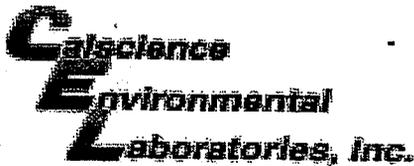
Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
2,4,5-Trichlorophenol	97	97	40-160	0	0-20	
2,4-Dichlorophenol	101	101	40-160	0	0-20	
2-Methylphenol	101	101	40-160	1	0-20	
2-Nitrophenol	131	131	40-160	0	0-20	
4-Chloro-3-Methylphenol	107	108	40-160	1	0-20	
Acenaphthene	102	101	55-121	1	0-15	
Benzo (a) Pyrene	119	122	17-163	2	0-20	
Chrysene	99	99	17-168	0	0-20	
Di-n-Butyl Phthalate	106	105	40-160	1	0-20	
Dimethyl Phthalate	100	100	40-160	1	0-20	
Fluoranthene	92	92	26-137	1	0-20	
Fluorene	100	100	59-121	0	0-20	
N-Nitrosodimethylamine	110	110	40-160	0	0-20	
Naphthalene	102	104	21-133	2	0-20	
Phenanthrene	99	99	54-120	1	0-20	
Phenol	108	108	40-160	0	0-20	
Pyrene	135	136	45-129	1	0-15	X

Note "X": The percent recovery is above acceptable control limits. The samples and method blank associated with this batch are non-detect, and therefore, the results have been reported without further clarification.

RPD - Relative Percent Difference, CL - Control Limit

Work Order Number: 07-03-0512

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



WORK ORDER #: 07 - 03 - 0512

Cooler 0 of 0

SAMPLE RECEIPT FORM

CLIENT: Teha Tech

DATE: 03.08.07

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
Chilled, cooler without temperature blank.
Chilled and placed in cooler with wet ice.
Ambient and placed in cooler with wet ice.
Ambient temperature.
°C Temperature blank.

LABORATORY (Other than CalScience Courier):

- °C Temperature blank.
°C IR thermometer.
Ambient temperature.

Initial: SF

CUSTODY SEAL INTACT:

Sample(s): Cooler: No (Not Intact): Not Present: Initial: SF

SAMPLE CONDITION:

Table with 3 columns: Yes, No, N/A. Rows include Chain-Of-Custody document(s) received with samples, Sampler's name indicated on COC, Sample container label(s) consistent with custody papers, Sample container(s) intact and good condition, Correct containers and volume for analyses requested, Proper preservation noted on sample label(s), VOA vial(s) free of headspace, Tedlar bag(s) free of condensation.

Initial: SF

COMMENTS:

Blank lines for comments.

0026

Table 5. Chemical Analyses for Elutriate and Site Water Samples

Analyte	Units	Analysis Method	Elutriate & Site Water Target Detection Limits ^{a,b}
Arsenic	µg/L	6020 ^d	10
Cadmium	µg/L	6020 ^d	2
Chromium	µg/L	6020 ^d	5
Copper	µg/L	6020 ^d	5
Lead	µg/L	6020 ^d	5
Mercury	µg/L	7471A ^d	0.2
Nickel	µg/L	6020 ^d	5
Selenium	µg/L	6020 ^d	10
Silver	µg/L	6020 ^d	2
Zinc	µg/L	6020 ^d	10
PAHs ^e	µg/L	8270C ^d	5
Organochlorine Pesticides ^f	µg/L	8081A ^d	5-25
PCBs ^g	µg/L	8082 ^d	5
Phenols	µg/L	8270C ^d	0.5
Phthalates	µg/L	8270C ^d	0.05-2
Organotins	µg/L	Rice/Krone ^h	1

^a Site water samples will be handled identically to elutriate samples.

^b Reporting limits provided by Calscience Environmental Laboratories, Inc.

^c Standard Methods for the Examination of Water and Wastewater, 19th Edition (APHA, 1995).

^d EPA 1986-1996. SW -846. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Edition.

^e Includes naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b,k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene.

^f Includes aldrin, D-BHC, D-BHC (lindane), D-BHC, chlordane, 2,4- & 4,4-DDD, 2,4- & 4,4-DDE, 4,4-DDT, dieldrin, endosulfan I and II, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, and toxaphene.

^g Includes Aroclors 1016, 1221, 1232, 1242, 1248, 1254, 1260, and 1262.

^h Rice, C.D. et al. 1987 or Krone et al. 1989)

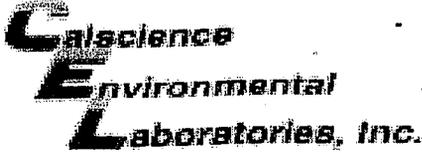
PAH – polycyclic aromatic hydrocarbon

PCB – polychlorinated biphenyl

TRPH – total recoverable petroleum hydrocarbons

mg/kg – milligrams per kilogram (parts per million)

µg/kg – micrograms per kilogram (parts per billion)



WORK ORDER #: 07 - 03 - 0026

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: TERRACE

DATE: 3/1/7

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

Chilled, cooler with temperature blank provided.

Chilled, cooler without temperature blank.

Chilled and placed in cooler with wet ice.

Ambient and placed in cooler with wet ice.

Ambient temperature.

3.8 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

°C Temperature blank.

°C IR thermometer.

Ambient temperature.

Initial: Am

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present:

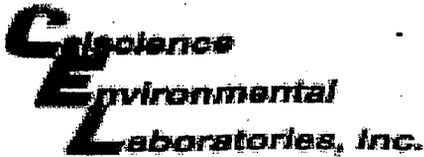
Initial: Am

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with custody papers.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers and volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on sample label(s).....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VOA vial(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial: Am

COMMENTS:



WORK ORDER #: 07 - 02 - 0546

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: AMEC

DATE: 02-08-07

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
Chilled, cooler without temperature blank.
Chilled and placed in cooler with wet ice.
Ambient and placed in cooler with wet ice.
Ambient temperature.
°C Temperature blank.

LABORATORY (Other than Calscience Courier):

- °C Temperature blank.
3.8 °C IR thermometer.
Ambient temperature.

Initial: SF

CUSTODY SEAL INTACT:

Sample(s): Cooler: No (Not Intact): Not Present:

Initial: SF

SAMPLE CONDITION:

Table with 4 columns: Item, Yes, No, N/A. Rows include Chain-Of-Custody document(s), Sampler's name, Sample container label(s), Sample container(s) intact, Correct containers and volume, Proper preservation, VOA vial(s) free of headspace, Tedlar bag(s) free of condensation.

Initial: SF

COMMENTS:

Sample (-1) B155a received 5 containers (3 stated on COC)
Sample (-2) B155 B received 3 containers (5 stated on COC)

02-09-07

To	From
	BD OF HARBOR COMMISSIONERS
	COMMISSION SECRETARY
	EXECUTIVE DIRECTOR
	CHIEF OPERATING OFFICER
	CHIEF FINANCIAL OFFICER
	DIR. OF BUSINESS DEVELOPMENT
	DIR. OF ENGINEERING DEVELOPMENT
	DIR. OF MARITIME SERVICES
	DIR. OF OPS & EMERG. MGMT.
	DIR. OF PLAN. & ENV. AFFAIRS
	DIR. OF PUBLIC AFFAIRS
	ACCOUNTING
	CITY ATTORNEY/H D
	COMMUNICATIONS SERVICES
	CONSTRUCTION
	CONSTRUCTION & MAINTENANCE
	CONTRACTS & PURCHASING
	EMERGENCY PREP COORD
X	ENGINEERING

CITY OF LOS ANGELES
HARBOR DEPARTMENT

OFFICE MEMORANDUM

March 12, 2008

To	From
	ENVIRONMENTAL MANAGEMENT X
	FINANCIAL MANAGEMENT
	HOMELAND SECURITY
	HUMAN RESOURCES
	INFORMATION SYSTEMS
	LEGISLATIVE REPRESENTATIVE
	MARKETING
X	PLANNING & RESEARCH
	PORT PILOTS
	PORT POLICE
X	PROPERTY MANAGEMENT
	RISK MANAGEMENT
	TEST LAB
	TREASURY MANAGEMENT
	WHARFINGERS

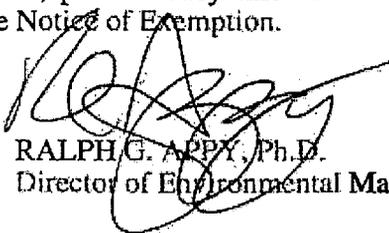
SUBJECT: ENVIRONMENTAL ASSESSMENT

The environmental assessment for the following:

Catalina Freight Line, Inc. - Catalina Freight Relocation to Berth 155

requested by Property Management, March 13, 2006, has been completed. We have determined that the proposed action is exempt from the requirements of the California Environmental Quality Act (CEQA) in accordance with Article III, Class 1(24) & 1(14), of the Los Angeles City CEQA Guidelines. A Categorical Exemption has been prepared and will be filed with the County and City Clerk's offices upon issuance of a Coastal Development Permit, Engineering Construction Permit, or any lease/entitlement. This CEQA determination is based upon the inclusion of the attached permit conditions.

If this project does not involve Board action, please notify this office upon issuance of any permit or entitlement so that we may file the Notice of Exemption.


RALPH G. APPY, Ph.D.
Director of Environmental Management

RG: PJ:SS
ADP No.: 060313-029
CDP No.:
Attachment(s)

 FILE COPY

3.12.08 *lga*

Notice of Exemption

To: Office of Planning and Research
PO Box 3044, 1400 Tenth Street, Room 222
Sacramento, CA 95812-3044

From: Los Angeles Harbor Department
425 S. Palos Verdes St.
San Pedro, CA 90731

County Clerk
County of Los Angeles

Project Title: 060313-029 - Catalina Freight Line, Inc.
Catalina Freight Relocation to Berth 155

Project Location - Specific:

Berth 155

Project Location - City: Los Angeles Project Location - County: Los Angeles

Description of Project:

The proposed project consists of the relocation of existing Catalina Freight Line (CFL) operations to Berths 155 and 156, and reuse of an existing warehouse in the Port of Los Angeles. The proposed project involves minor interior improvements to the warehouse, and waterside work to accommodate berthing for CFL.

Name of Public Agency Approving Project: Los Angeles Harbor Department

Name of Person or Agency Carrying Out Project: Catalina Freight Line, Inc.

Exempt Status: (check one)

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: 1(24) & 1(14)
- Statutory Exemptions. State code number: _____

Reasons why project is exempt:

Relocation of an existing use (Catalina Freight Line) within a publicly owned facility.

Lead agency

Contact Person: Shirin Sadrpour Area Code/Telephone/Extension: 310 732-3675

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature: Ralph G. Abaya Date: 03/12/08 Title: Director of Environmental Management

- Signed by Lead Agency
- Signed by Applicant

Date received for filing at OPR: _____

Permit Conditions: Construction

Construction Measures to be included in Construction Specifications

Construction Calculator: Port construction contractor will use the Construction Emissions Calculator, and submit two weekly reports to the Port Construction Division and Environmental Management Division. One report will plan out the proposed work for the upcoming week and estimate construction emissions, demonstrating that emissions for the proposed equipment are below the daily threshold. The other report will document actual construction equipment emissions from the past week. The weekly reports will be monitored by the Environmental Management Division to ensure compliance with SCAQMD daily thresholds.

Best Management Practices: LAHD will implement additional best management practices (BMPs) to further reduce air emissions during construction. Such measures include the following:

- Using diesel oxidation catalysts and catalyzed diesel particulate traps
- Properly maintaining equipment according to manufacturers' specifications
- Restricting the idling of construction equipment to a maximum of 10 minutes when not in use

Silt Curtain: During construction, the LAHD contractor will deploy a floating silt curtain along the in-water work area to reduce impacts to fish and water quality. This would exclude most fish from the work area and would reduce the potential for acoustical impacts associated with pile driving by increasing the distance between the noise source and fish. The silt curtain would also contain turbidity associated with dredging and in-water construction.

Sampling: Before and after dredging, the LAHD contractor will sample and test sediment from the project site for contamination before and after dredging. If sediments are contaminated, they will be disposed of at a site approved for contaminated sediment disposal. A portion of the dredged area will be covered with rock after dredging; if sediment contamination is present following dredging, capping the entire dredged area with larger grain sized clean sediment or rock may be used to improve benthic habitat and reduce contamination of water and biota from sediment.

Caulerpa Survey: Between 30 and 90 days prior to beginning in-water work, the Port, or its designated consultant, will survey the project area for invasive algae according to the methods of the *Caulerpa* survey protocol (NMFS and CDFG 2006, or as updated). In the event that *Caulerpa* is discovered at the site, an eradication plan would be prepared and submitted to NMFS and DFG for approval, and implemented prior to project construction. The plan would include BMPs for *Caulerpa* containment and removal, which could include measures such as surrounding the site with a floating silt curtain, killing existing algae on site, and disposal of all dredged material at an approved upland location with no potential for spreading the algae to other marine habitats.

Disposal Management Plan: LAHD or its designated contractor will prepare a disposal management plan to prevent disposal of large debris at all disposal locations which will include sources and expected types of debris, debris separation and retrieval methods, and debris disposal methods.

Inspector: The permittee will have a dredging operation inspector present on the dredging vessel at all times during dredging operations. The dredging operations inspector will ensure that all relevant permit conditions are obeyed during the dredging operations.

Site Remediation: Unless otherwise authorized by the lead regulatory agency for any given site, the LAHD shall remediate all contaminated soils within proposed Project boundaries prior to or during demolition and grading activities. Remediation shall occur in compliance with local, state, and federal

Construction Hours. Limit construction to the hours of 7:00 AM to 9:00 PM on weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance.

Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work).

Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines. When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors.

Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas.

Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses.

Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance.

Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing.

Reporting. The Port shall clearly post the telephone number where complaints regarding construction related disturbances can be reported and proper steps taken to determine the source of the complaint and a remedy.

Permit Conditions: Lease Renewal

Performance Standards for Cargo Handling Equipment (CHE):

Beginning 2007, all CHE purchases will meet one of the following performance standards:

- Cleanest available NOx alternative-fueled engine, meeting 0.01 g/bhp-hr PM, available at time of purchase, or
- Cleanest available NOx diesel-fueled engine, meeting 0.01g/bhp-hr PM, available at time of purchase
- If there are no engines available that meet 0.01 g/bhp-hr PM, then must purchase cleanest available engine (either fuel type) and install cleanest VDEC available.

By the end of 2010, all yard tractors would meet at a minimum the USEPA Tier 4 non-road emission standards.

By the end of 2012, all non-yard tractor terminal equipment less than 750 Hp shall meet the USEPA Tier 4 non-road engine standards.

By the end of 2014, all terminal equipment shall meet USEPA Tier 4 non-road engine standards .

Compact Fluorescent Light Bulbs: All CFL interior building lighting shall use compact fluorescent light bulbs. Fluorescent light bulbs produce less waste heat and use substantially less electricity than incandescent light bulbs.

Energy Audit: Catalina Freight shall conduct a third party energy audit every 5 years and install innovative power saving technology where feasible, such as power factor correction system and lighting power regulators. Such systems help to maximize usable electric current and eliminate wasted electricity, thereby lowering overall electricity use.

Waste Management:

Waste Reduction

- (i) Tenant shall reduce the amount of solid waste that its generates by [40% or such- rate to be established per Section (a) (3)] below the solid waste generation baseline established in Section (a) (3) during the 5 year period commencing on the date of execution of this lease.
- (ii) POLA shall meet with the tenant on each 5th anniversary of the date of execution of this lease to establish a new waste reduction requirement for the next 5 year period.

Recycling

- (i) Tenant shall increase the rate of its recycling by [50% or such- rate to be negotiated per section (a)(3)] above the recycling baseline established in Section (a)(3) during the 5 year period commencing on the date of execution of this lease.
- (ii) POLA shall meet with the tenant on each 5th anniversary of the date of execution of this lease to establish a new recycling requirement for the next 5 year period.

Reporting

Commencing on the first September 1st after the date of execution of this lease, and continuing on each September 1st there after during the term of this lease, tenant shall provide to POLA records of Solid waste disposed as well as records of recycling materials during the previous 365 days.

Tree Planting: Catalina Freight shall plant shade trees around the main building. All trees shall be maintained and replaced over the entire lease term. Trees shall be native trees with low watering requirements.