APPENDIX A1

CORE LOGS
INITIAL EVENT

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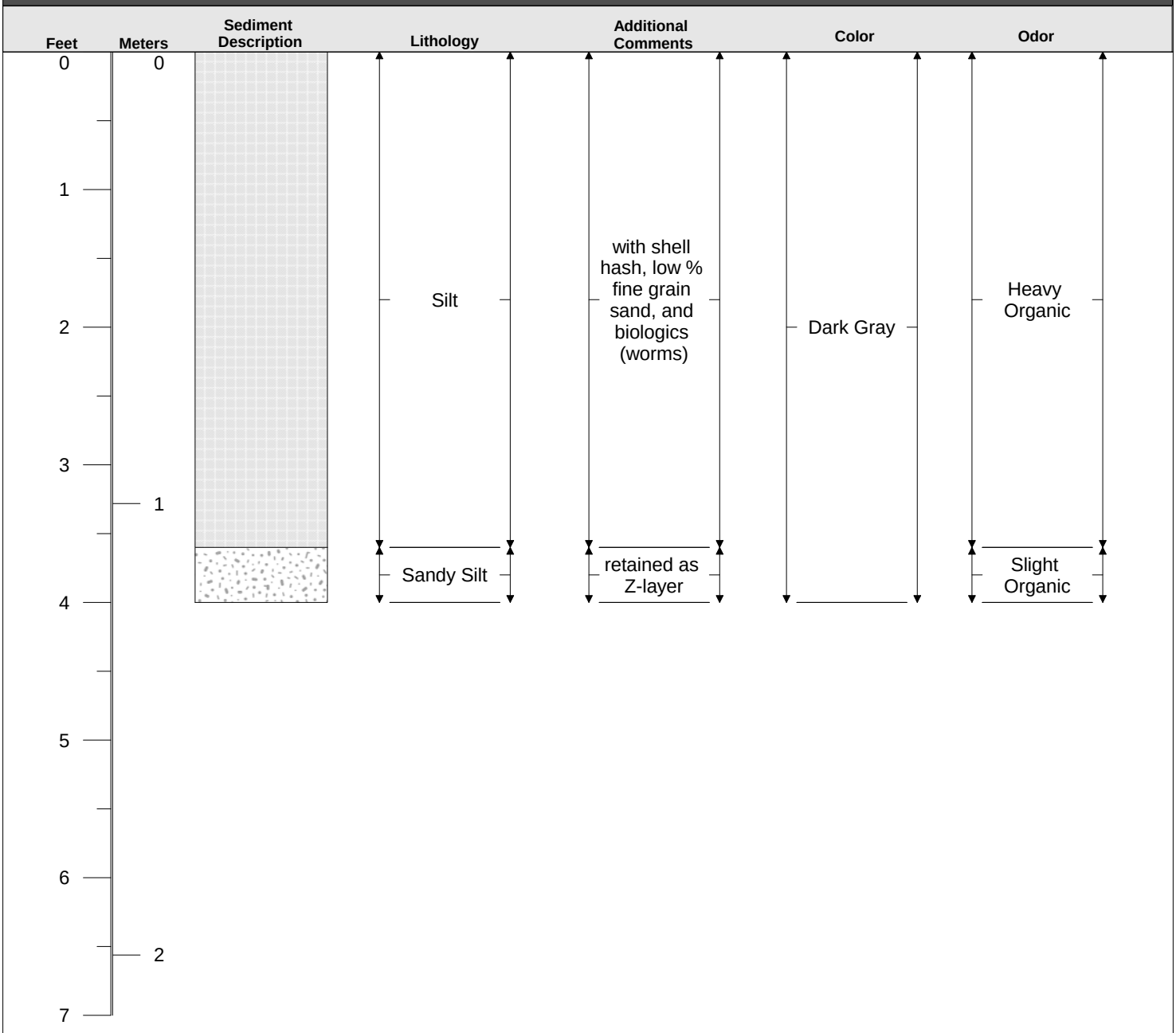
amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 1
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 6/22/2011
Time: 13:10
Latitude (WGS84): 33° 45.343'
Longitude (WGS84): -118° 16.076'



Water Depth (ft): 41.2
Tide (ft): 2.8
Attempt: 1

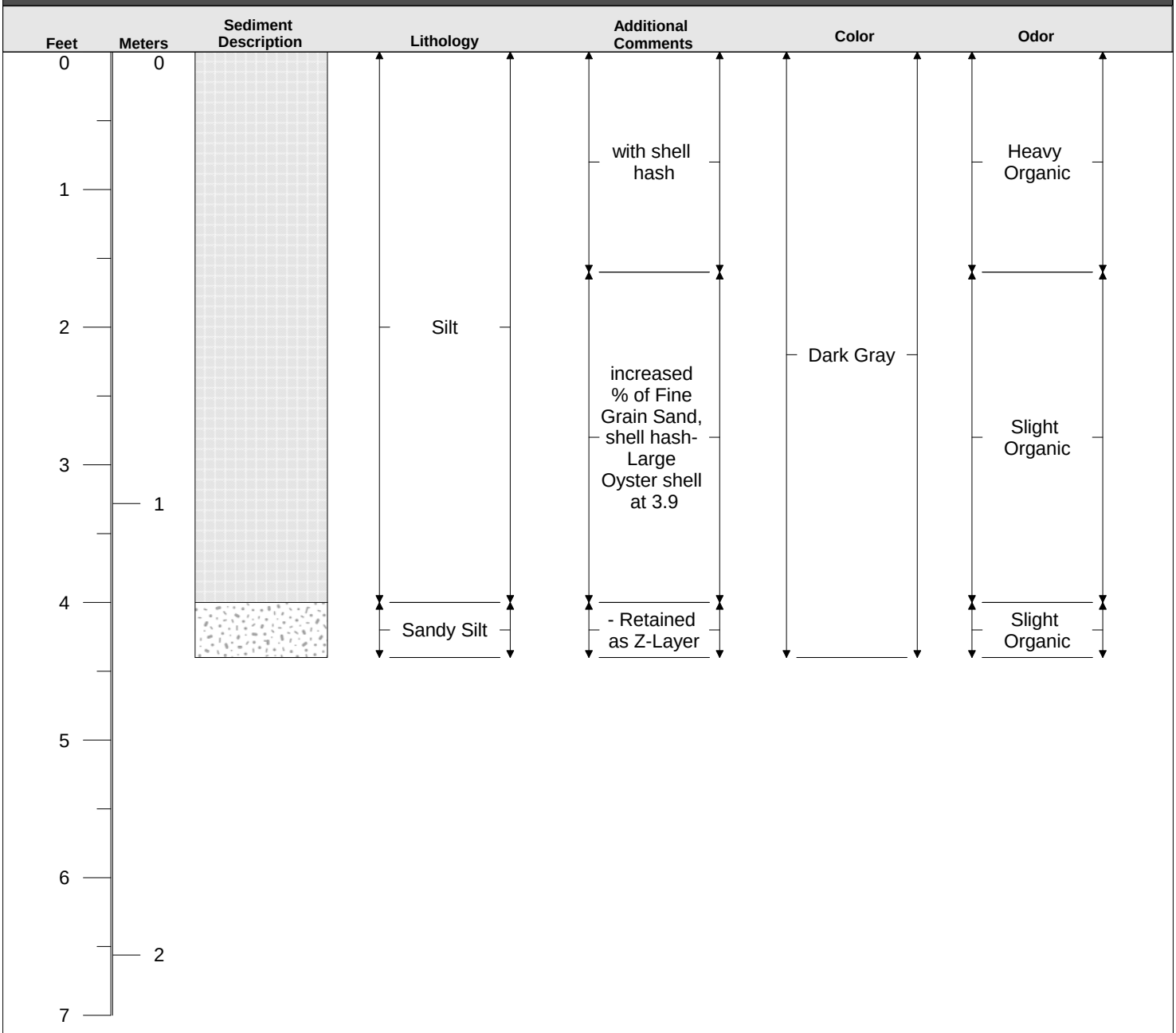
Penetration (ft): 4.1
Analysis Length (ft): 4

Comments:

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 2
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 6/22/2011
Time: 14:36
Latitude (WGS84): 33° 45.310'
Longitude (WGS84): -118° 16.073'



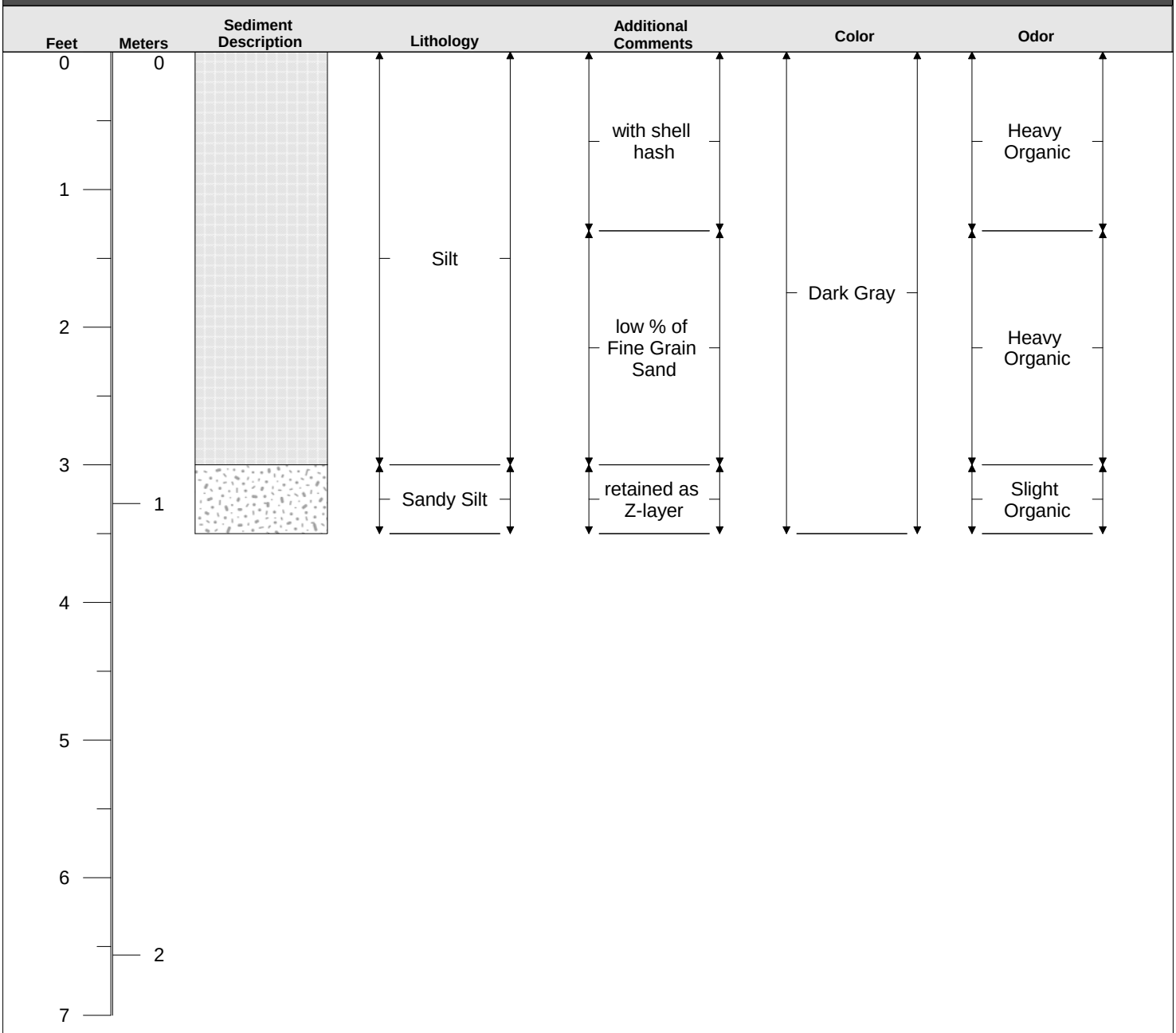
Water Depth (ft): 41.6
Tide (ft): 3.6
Attempt: 1

Penetration (ft): 4.5
Analysis Length (ft): 4.4
Comments: visable sheen throughout length of core

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 3
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 6/22/2011
Time: 14:43
Latitude (WGS84): 33° 45.243'
Longitude (WGS84): -118° 16.069'



Water Depth (ft): 41.9
Tide (ft): 3.4
Attempt: 2

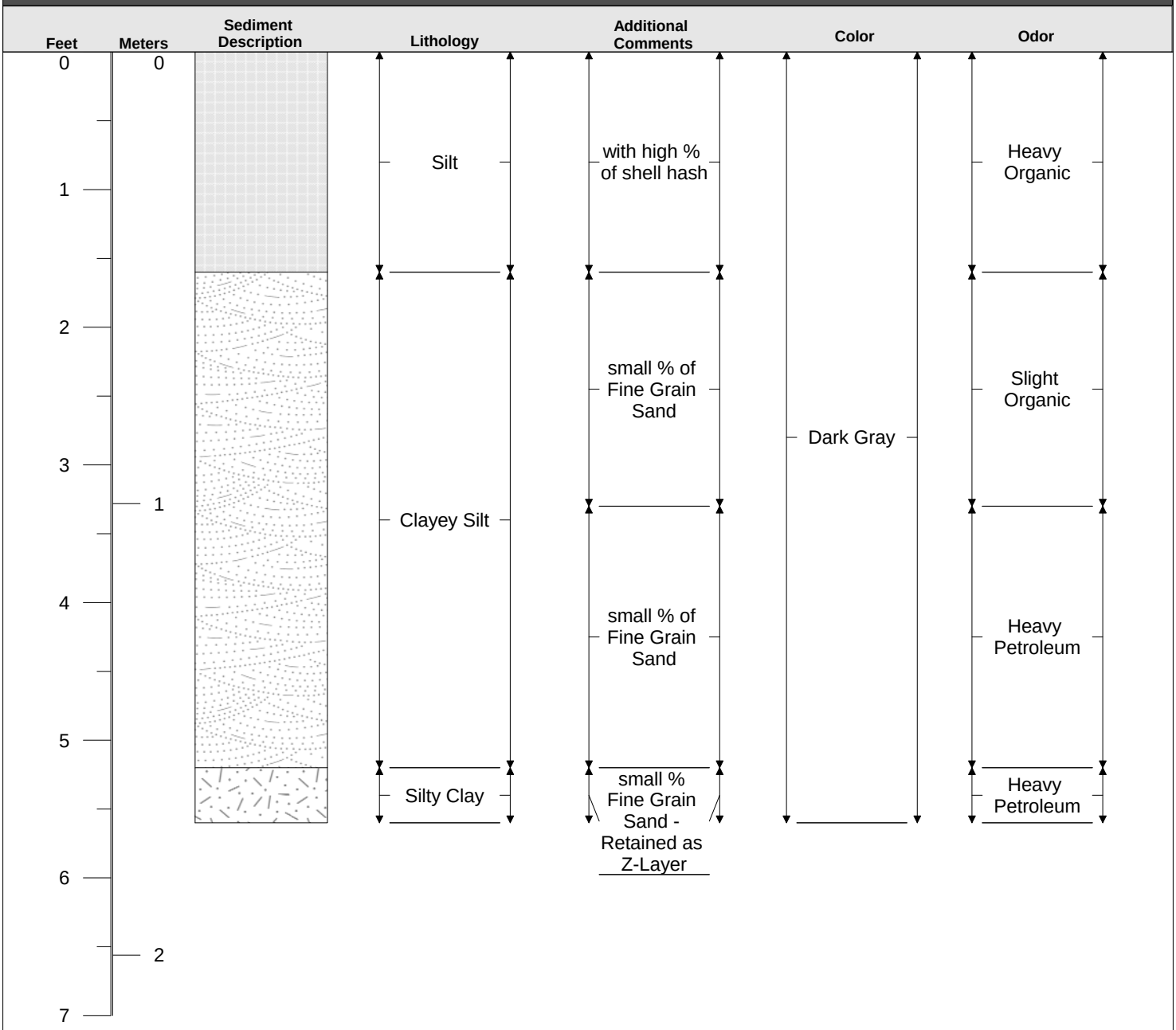
Penetration (ft): 4
Analysis Length (ft): 3.5

Comments:

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 4
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 6/7/2011
Time: 15:00
Latitude (WGS84): 33° 45.214'
Longitude (WGS84): -118° 16.066'



Water Depth (ft): 41
Tide (ft): 4.2
Attempt: 2

Penetration (ft): 5.7
Analysis Length (ft): 5.6

Comments:

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 5
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 6/7/2011
Time: 16:00
Latitude (WGS84): 33° 45.190'
Longitude (WGS84): -118° 16.061'

Feet	Meters	Sediment Description	Lithology	Additional Comments	Color	Odor
0	0		Sandy Silt	with small % of Shell Hash	Dark Gray	Slight Organic
1				with small % of Clay		None
2				with small % of Clay		None
3	1					
4				with small % of Clay		Heavy Petroleum
5				with small % of Clay-Retained as Z-layer		Heavy Petroleum
6	2					
7						

Water Depth (ft): 39.6
Tide (ft): 4.1
Attempt: 1

Penetration (ft): 7
Analysis Length (ft): 6.4

Comments: visable sheen near bottom portion of the core

APPENDIX A2

CORE LOGS
SUPPLEMENTAL EVENT

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amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 1
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/23/2011
Time: 10:20
Latitude (WGS84): 33° 45.343'
Longitude (WGS84): -118° 16.077'

Feet	Meters	Sediment Description	Lithology	Additional Comments	Color	Odor
0	0		Silt	with shell hash	dark grey	Heavy Petroleum

Feet: 0, 2, 4, 6, 8, 10, 12, 14
Meters: 0, 1, 2, 3, 4

Water Depth (ft): 40.5
Tide (ft): 3.2
Attempt: 1

Penetration (ft): 4.7
Analysis Length (ft): 3

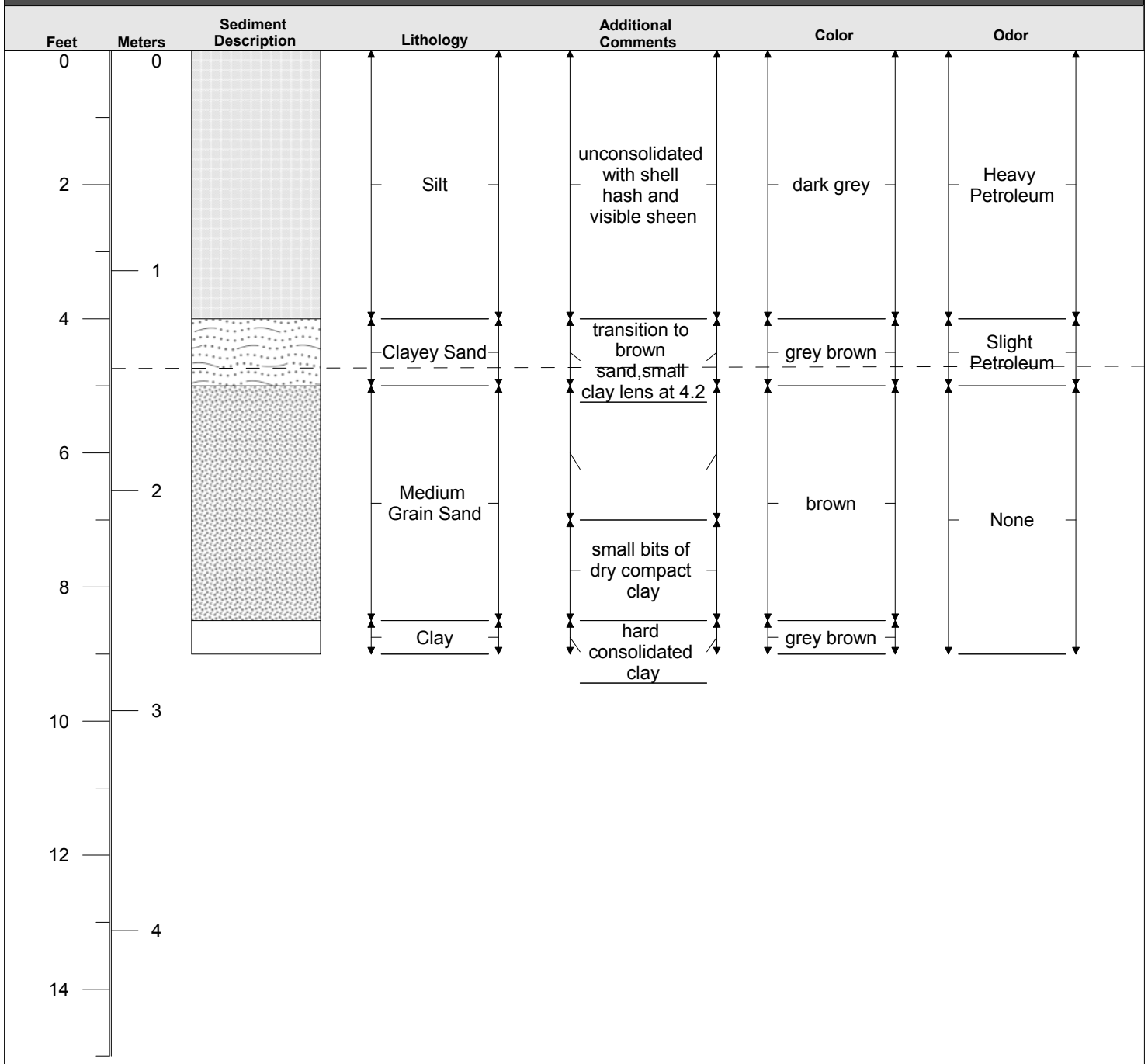
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
dredged material samples retained as archive

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 1
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/23/2011
Time: 10:55
Latitude (WGS84): 33° 45.343'
Longitude (WGS84): -118° 16.077'



Water Depth (ft): 40.5
Tide (ft): 3.2
Attempt: 2

Penetration (ft): 10
Analysis Length (ft): 9

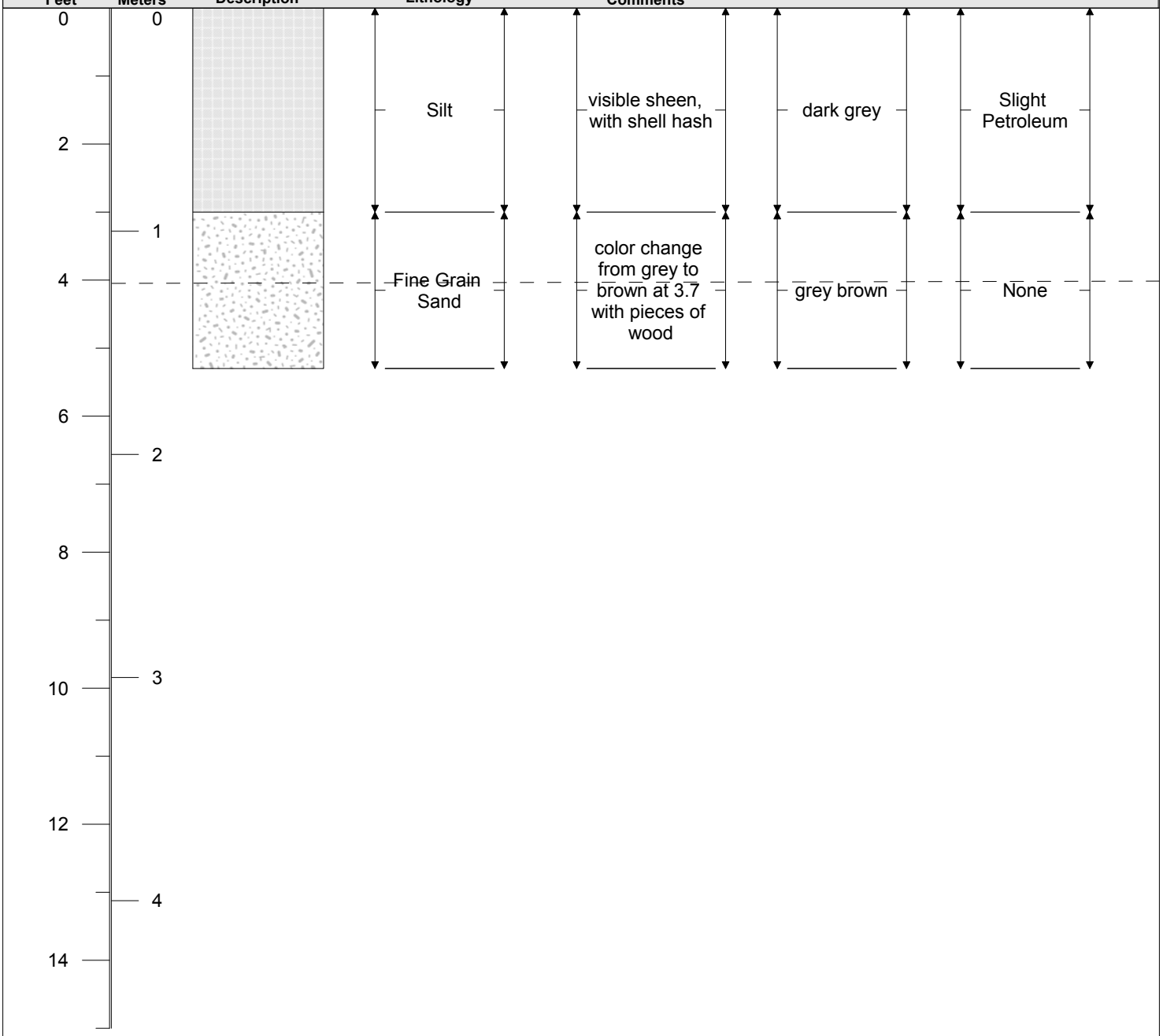
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
reached native material, clay plug in core catcher

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 2
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/23/2011
Time: 8:20
Latitude (WGS84): 33° 45.311'
Longitude (WGS84): -118° 16.074'



Water Depth (ft): 42.3
Tide (ft): 4.3
Attempt: 1

Penetration (ft): 5.3
Analysis Length (ft): 4

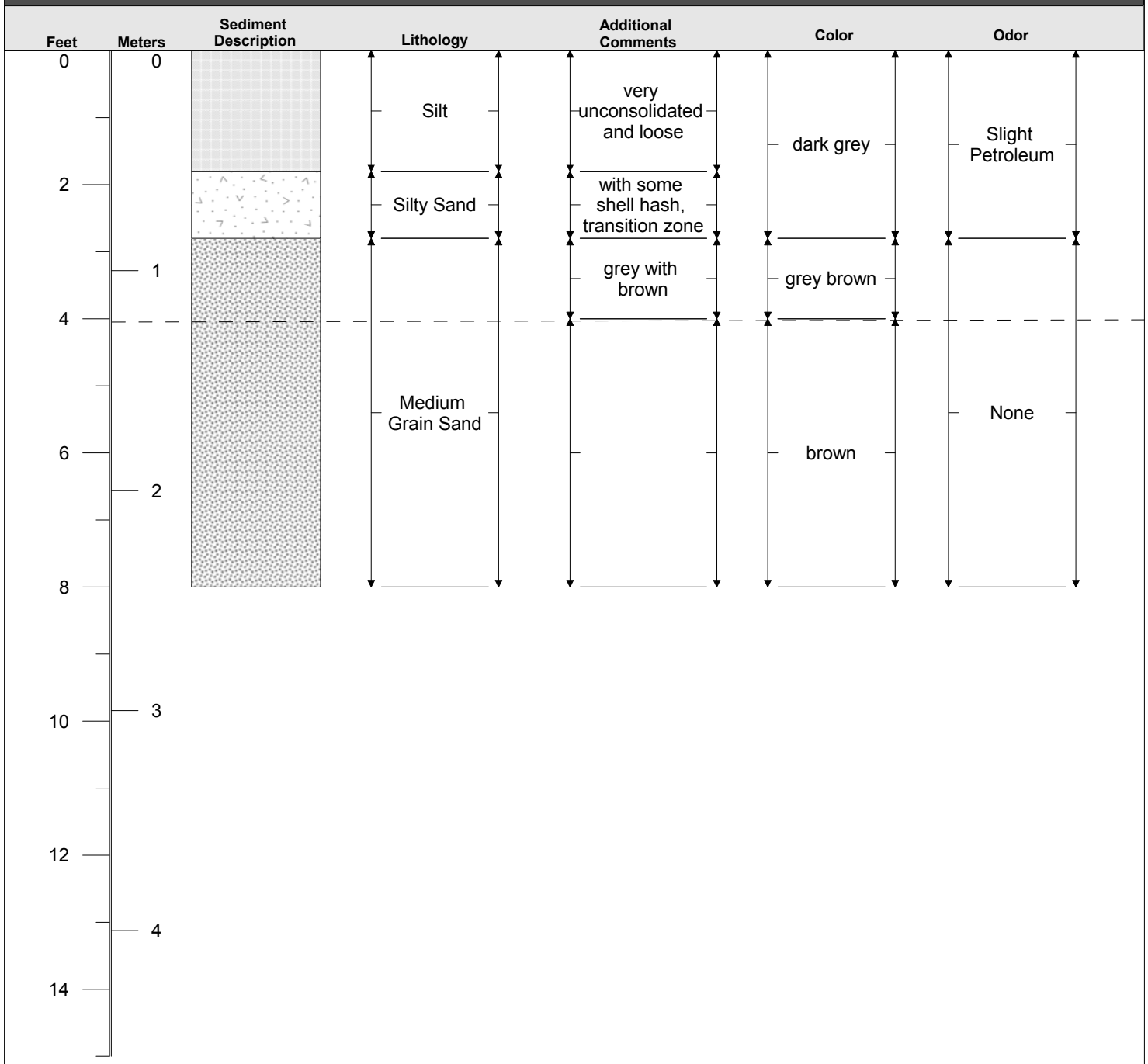
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
Overdredge material saved for testing as needed

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 2
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/23/2011
Time: 9:00
Latitude (WGS84): 33° 45.311'
Longitude (WGS84): -118° 16.074'



Water Depth (ft): 42.1
Tide (ft): 4.1
Attempt: 2

Penetration (ft): 9
Analysis Length (ft): 8

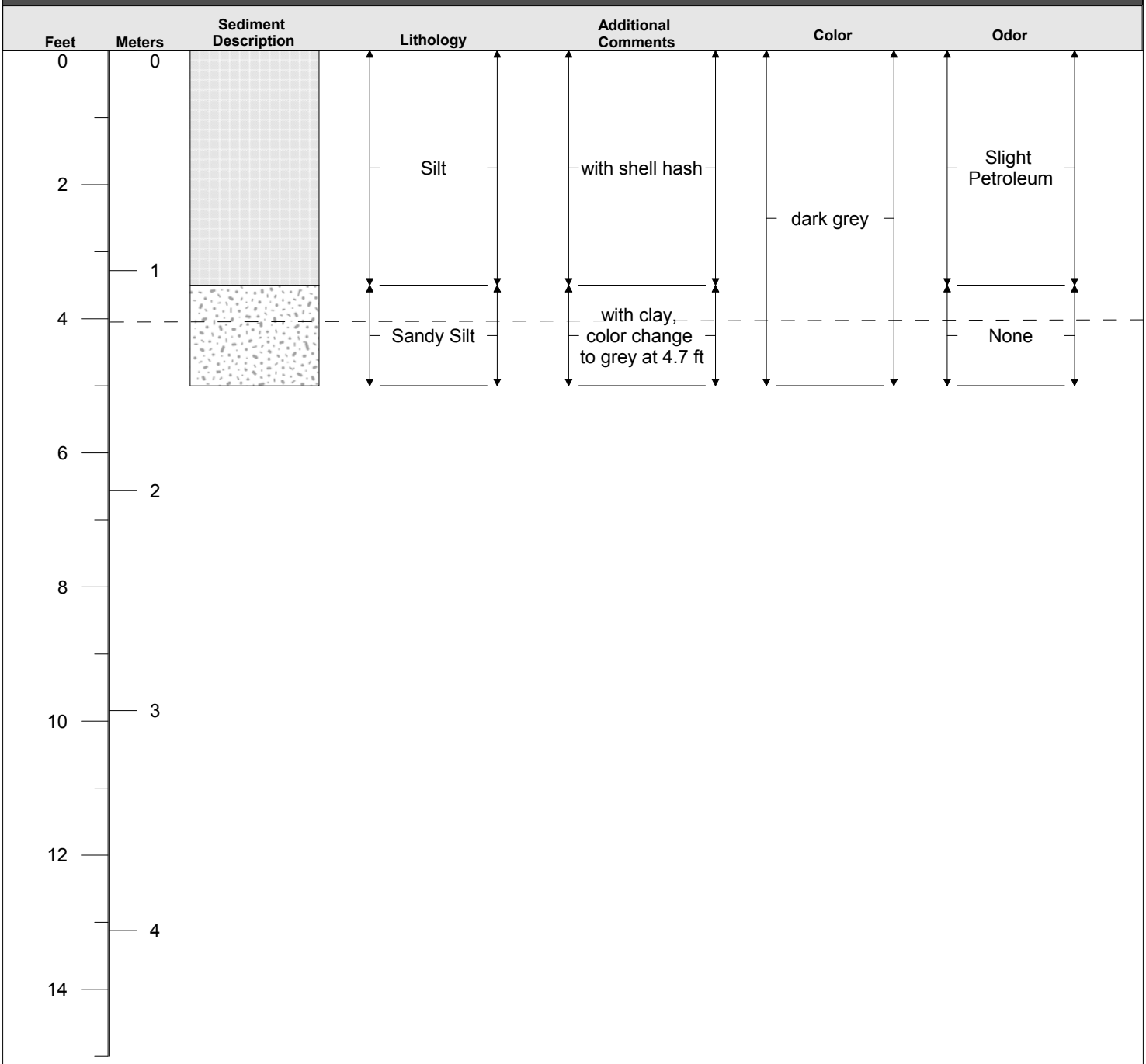
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
reached native material

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 3
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/22/2011
Time: 14:37
Latitude (WGS84): 33° 45.243'
Longitude (WGS84): -118° 16.070'



Water Depth (ft): 41.6
Tide (ft): 3.6
Attempt: 1

Penetration (ft): 5
Analysis Length (ft): 4

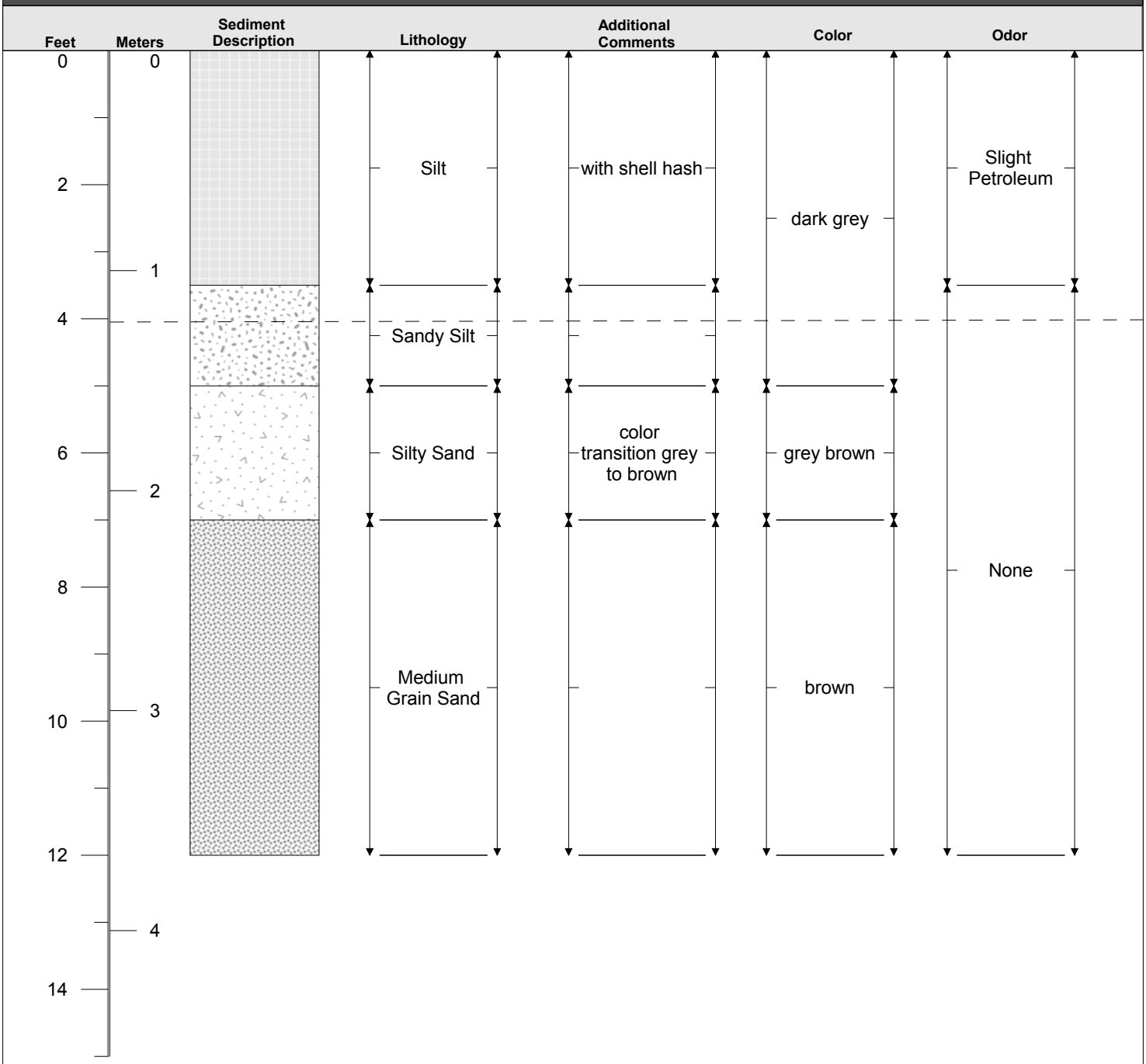
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
Penetration to1 ft beyond overdredge depth.

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 3
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/22/2011
Time: 15:11
Latitude (WGS84): 33° 45.243'
Longitude (WGS84): -118° 16.070'



Water Depth (ft): 41.9
Tide (ft): 3.9
Attempt: 2

Penetration (ft): 12
Analysis Length (ft): 12

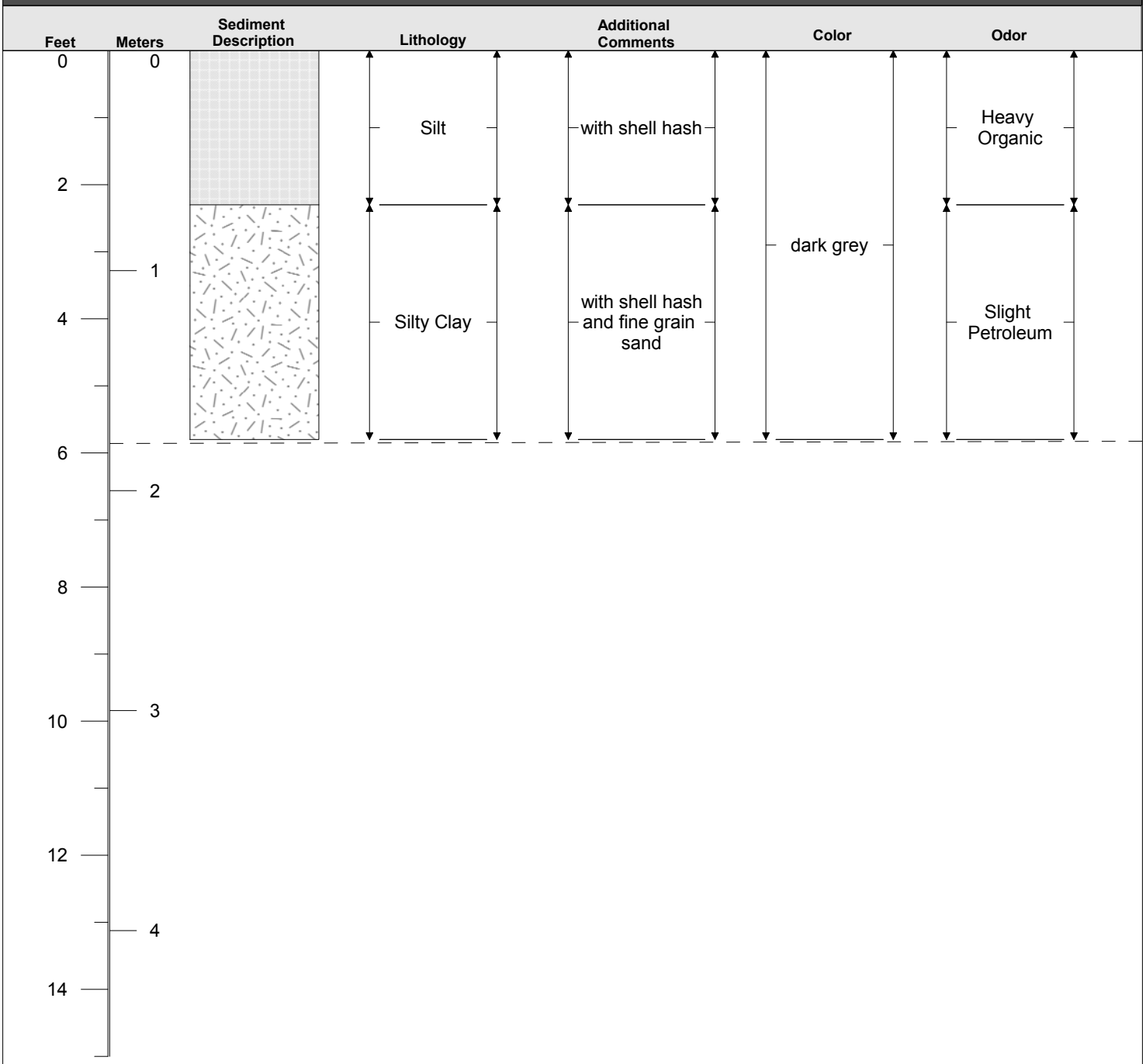
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
reached native material

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 4
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/22/2011
Time: 12:11
Latitude (WGS84): 33° 45.215'
Longitude (WGS84): -118° 16.067'



Water Depth (ft): 39
Tide (ft): 2.8
Attempt: 1

Penetration (ft): 5.8
Analysis Length (ft): 5.8

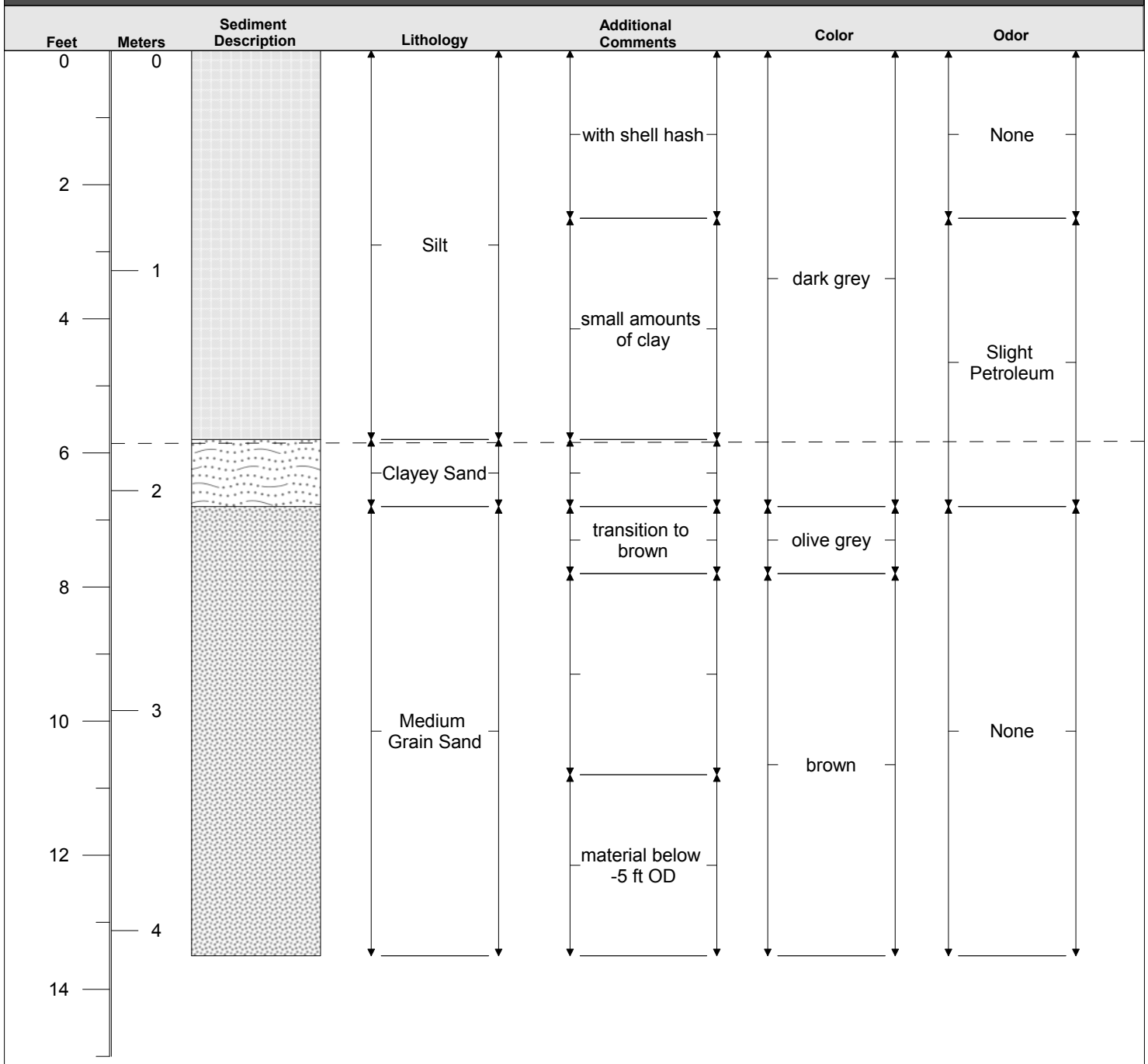
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
archive of core and overdredge material

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 4
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/22/2011
Time: 13:15
Latitude (WGS84): 33° 45.215'
Longitude (WGS84): -118° 16.067'



Water Depth (ft): 39.2
Tide (ft): 3
Attempt: 2

Penetration (ft): 15.5
Analysis Length (ft): 13.5

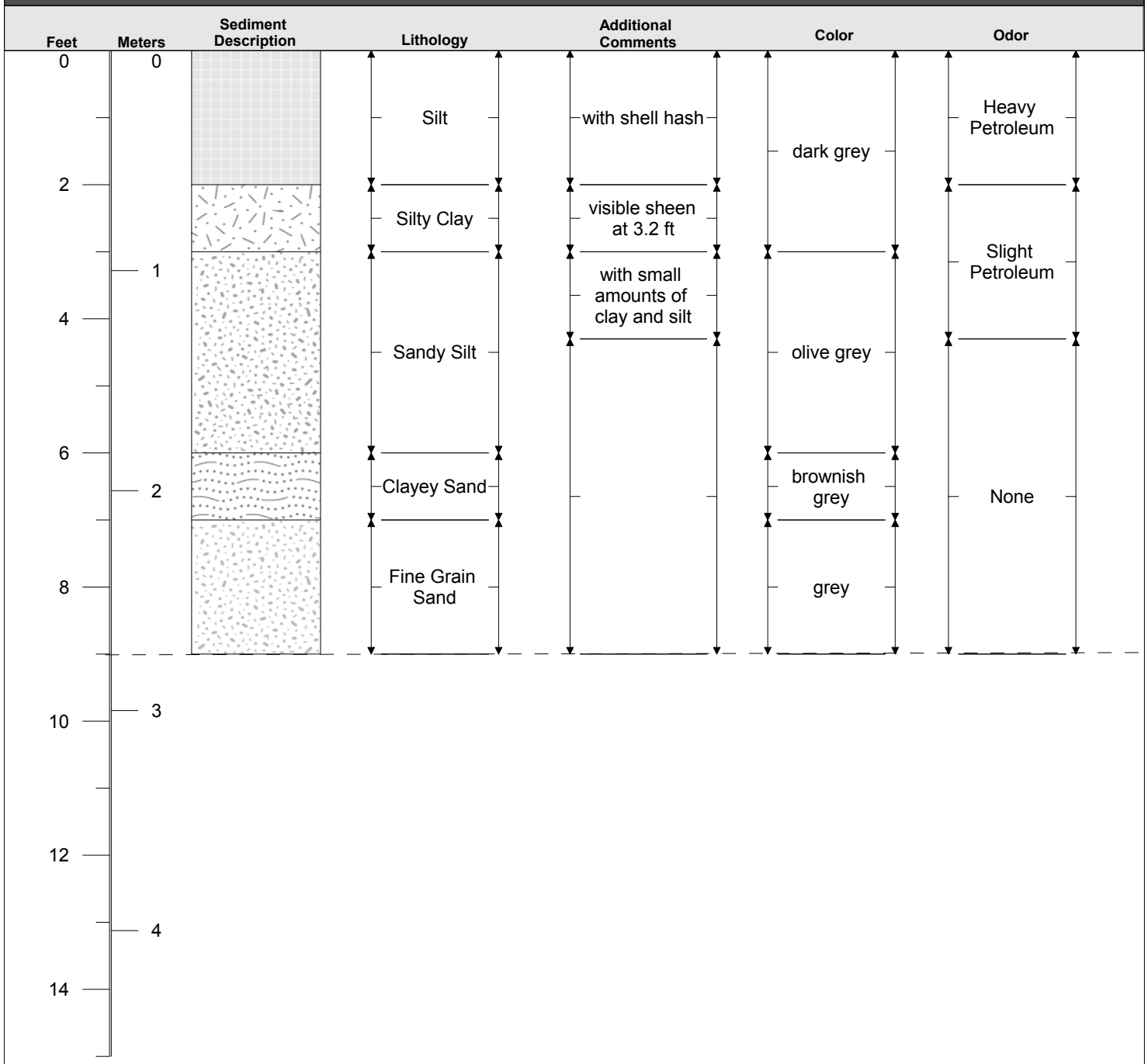
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
reached native material

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 5
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/22/2011
Time: 8:35
Latitude (WGS84): 33° 45.190'
Longitude (WGS84): -118° 16.061'



Water Depth (ft): 37
Tide (ft): 3.8
Attempt: 1

Penetration (ft): 9
Analysis Length (ft): 9

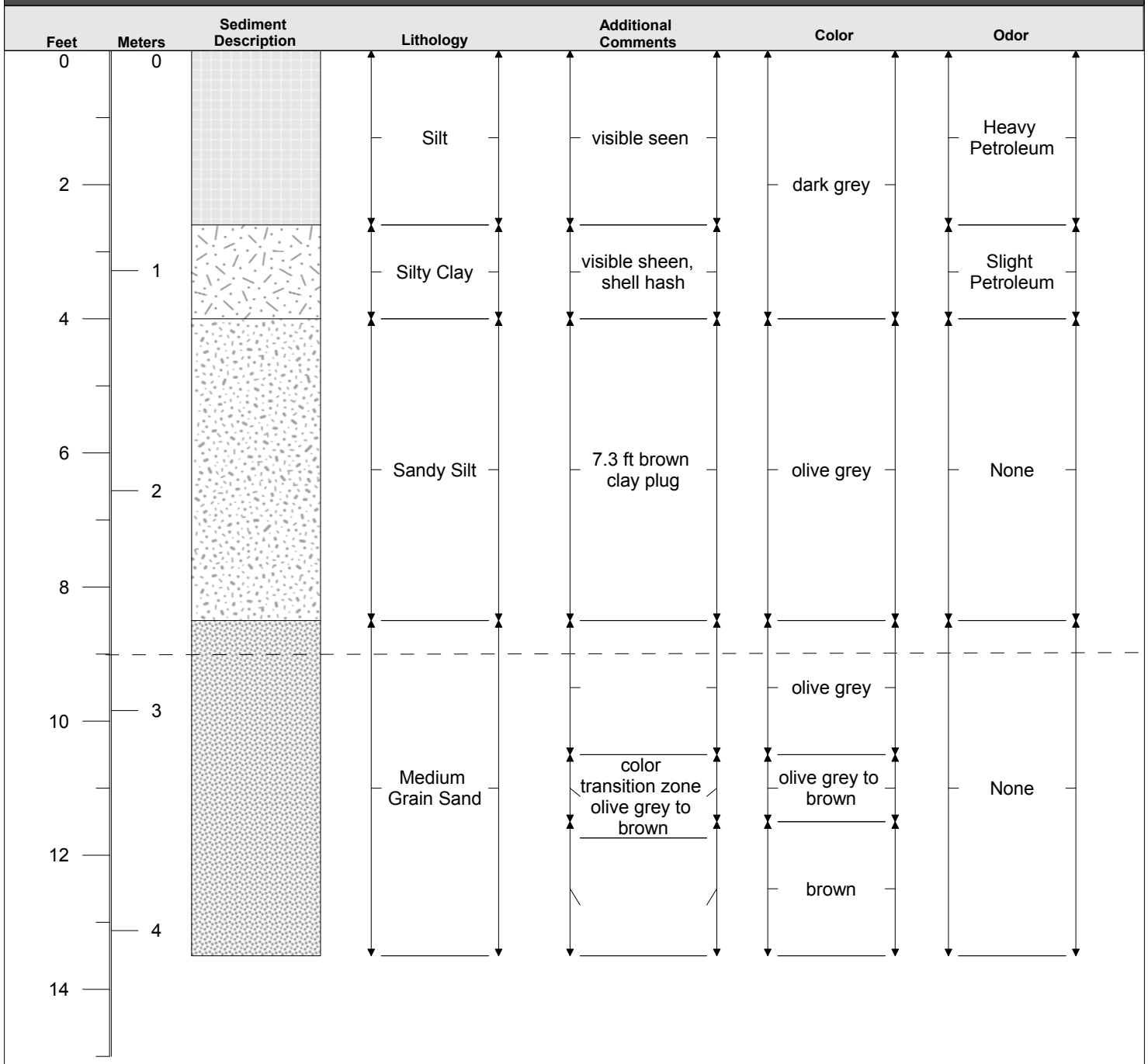
Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
archives taken of separate strata, dredge, and overdredge material

amec
9210 Sky Park Court, Suite 200
San Diego, CA 92123
858-300-4300

Station ID: 5
Project: Berth 167 - 169
Project Manager: Barry Snyder

Date: 9/22/2011
Time: 10:42
Latitude (WGS84): 33° 45.190'
Longitude (WGS84): -118° 16.061'



Water Depth (ft): 36.1
Tide (ft): 2.9
Attempt: 2

Penetration (ft): 15.5
Analysis Length (ft): 13.5

Log Notes:
Dashed line indicates target dredge depth at time of sampling

Comments:
reached native material

APPENDIX B1

CORE PHOTOGRAPHS
INITIAL EVENT

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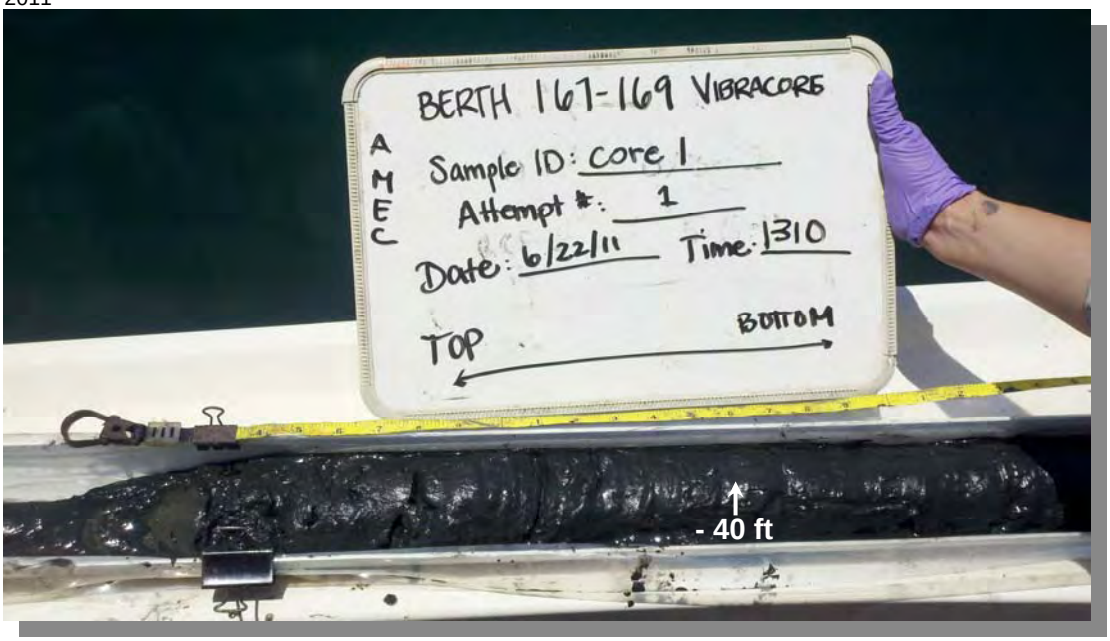
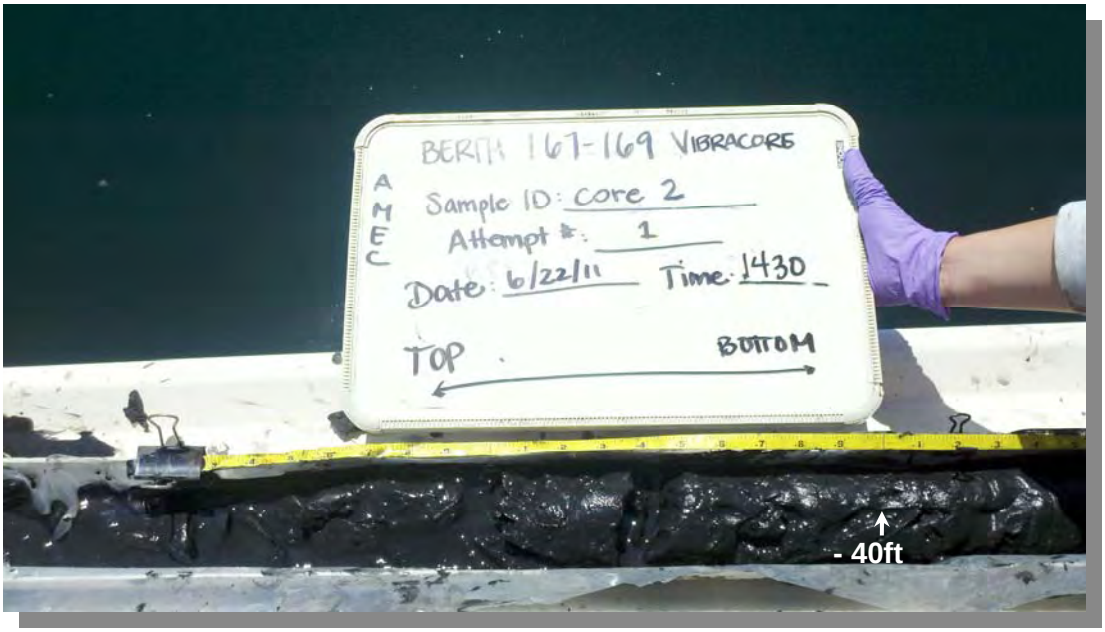
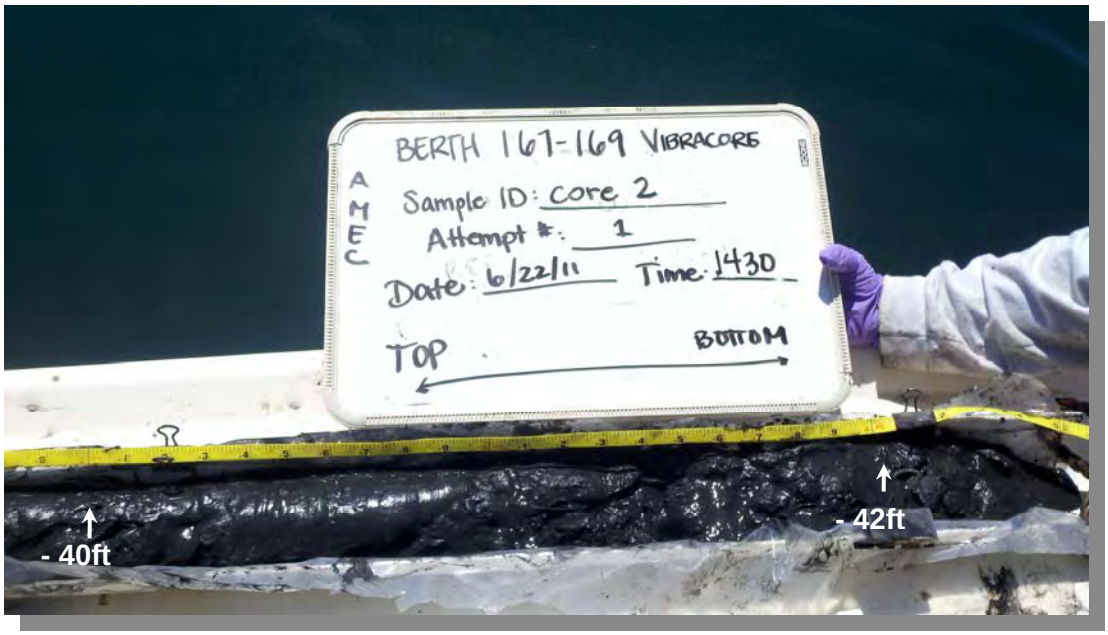


Location: Berth 167-169 Composite Area A
Station #: 1
Attempt #: 1
Depth: -38.4 to -40.9 feet MLLW

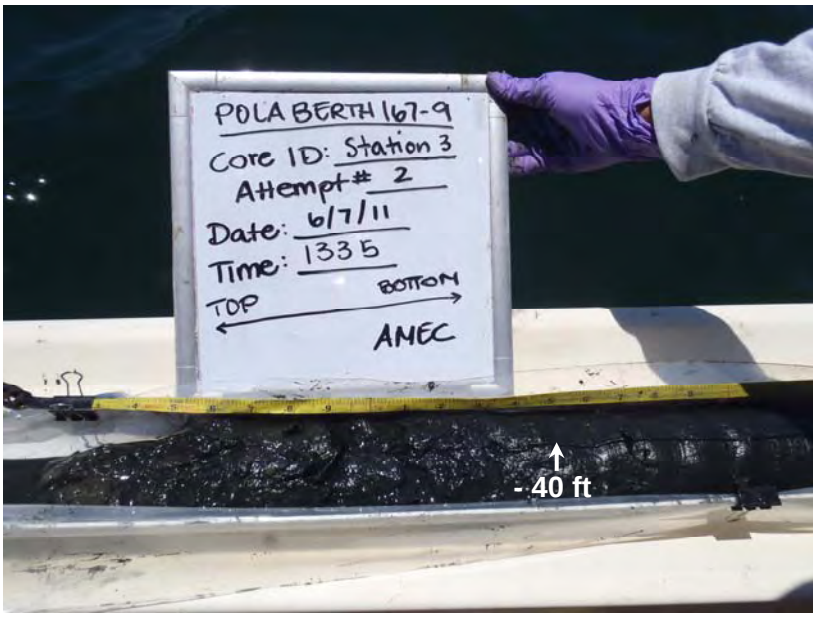
Location: Berth 167-169 Composite Area A
Station #: 1
Attempt #: 1
Depth: -39.9 to -42.5 feet MLLW



Location: Berth 167-169 Composite Area A
Station #: 2
Attempt #: 1
Depth: -38 to -40.5 feet MLLW

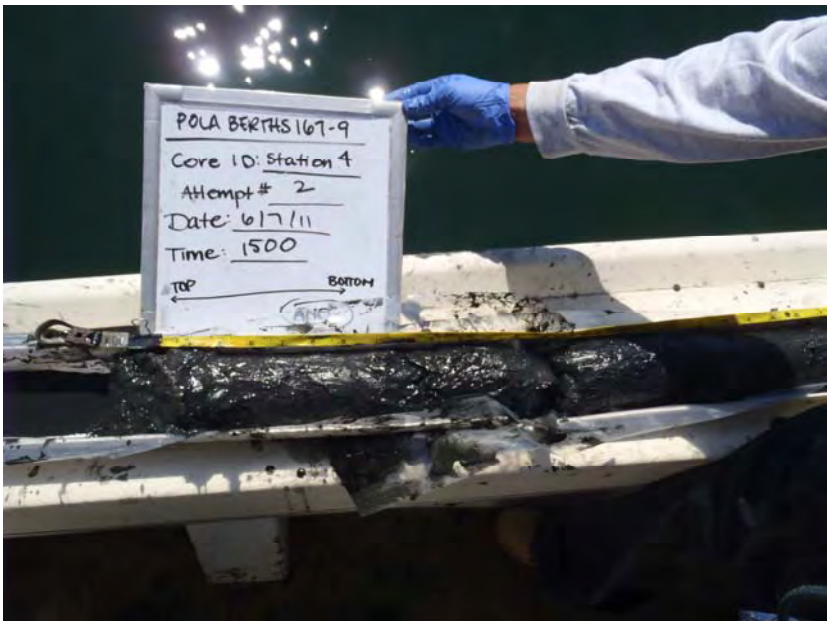


Location: Berth 167-169 Composite Area A
Station #: 2
Attempt #: 1
Depth: -39.8 to -42.5 feet MLLW



Location: Berth 167-169 Composite Area B
Station #: 3
Attempt #: 2
Depth: -38.5 to -40.8 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 3
Attempt #: 2
Depth: -40.3 to -42 feet MLLW

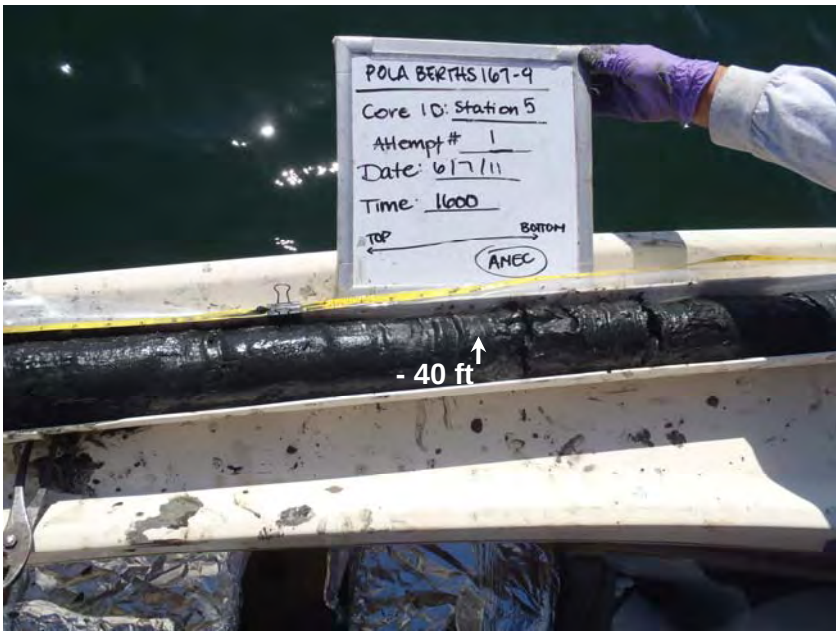


Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 2
Depth: -36.8 to -39.5 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 2
Depth: -37.7 to -40.8 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 2
Depth: -40.3 to -42.5 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 5
Attempt #: 1
Depth: -35.5 to -38.1 feet MLLW



Location: Berth 167-169 Composite Area B
Station #: 5
Attempt #: 1
Depth: -38.5 to -41.5 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 5
Attempt #: 1
Depth: -40.4 to -42 feet MLLW

APPENDIX B2

CORE PHOTOGRAPHS
SUPPLEMENTAL EVENT

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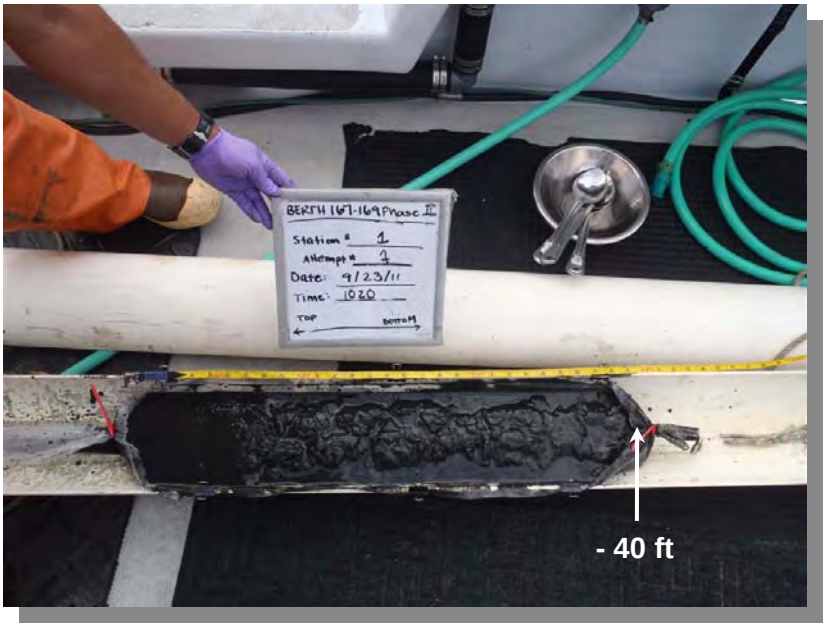
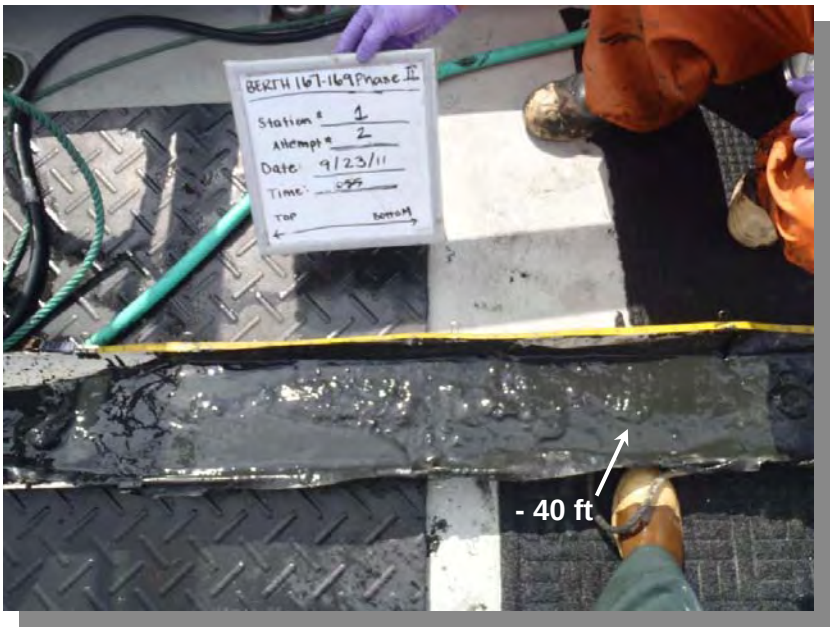
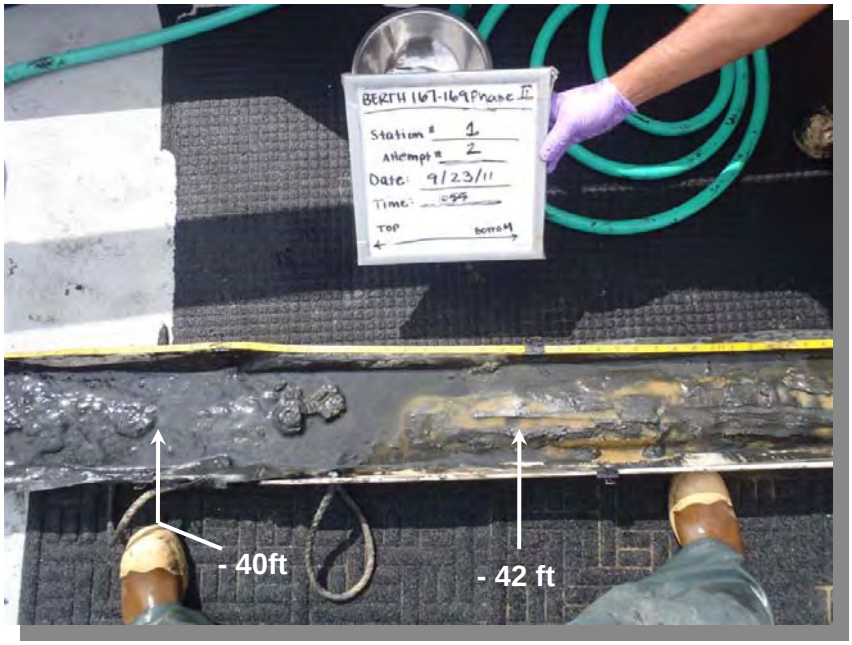


Location: Berth 167-169 Composite Area A
Station #: 1
Attempt #: 1
Depth: -37.3 to -40.3 feet MLLW

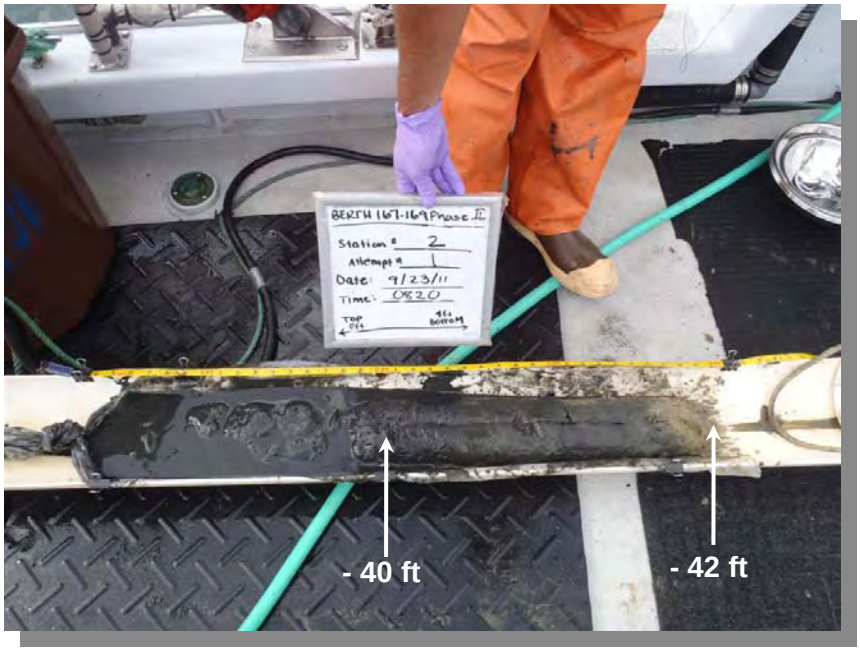


Location: Berth 167-169 Composite Area A
Station #: 1
Attempt #: 2
Depth: -37.3 to -40.3 feet MLLW

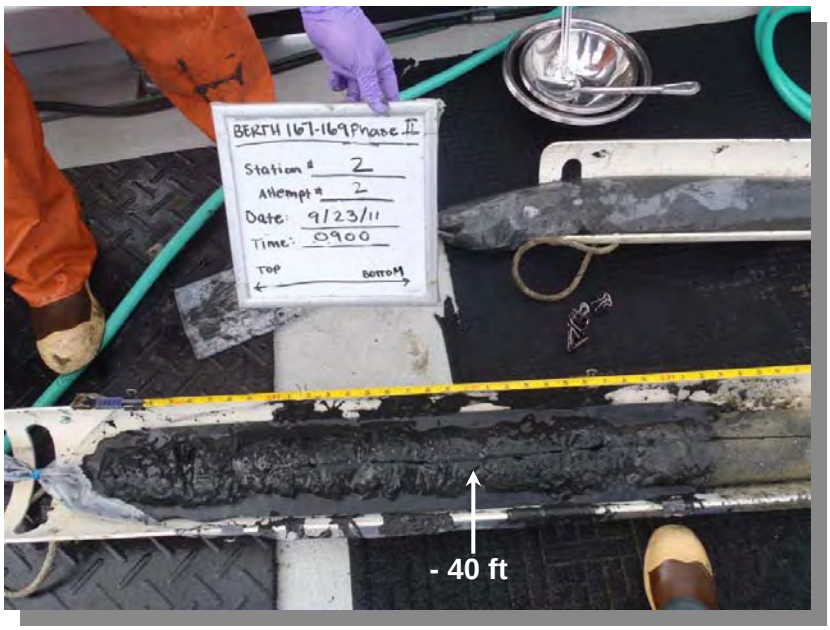


Location: Berth 167-169 Composite Area A
Station #: 1
Attempt #: 2
Depth: -40.3 to -43.3 feet MLLW

Location: Berth 167-169 Composite Area A
Station #: 1
Attempt #: 2
Depth: -43.3 to -46.3 feet MLLW



Location: Berth 167-169 Composite Area A
Station #: 2
Attempt #: 1
Depth: -38 to -42 feet MLLW



Location: Berth 167-169 Composite Area A
Station #: 2
Attempt #: 2
Depth: -38 to -41 feet MLLW

Location: Berth 167-169 Composite Area A
Station #: 2
Attempt #: 2
Depth: -41 to -44 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 3
Attempt #: 1
Depth: -38 to -42 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 3
Attempt #: 1
Depth: -40 to -43 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 3
Attempt #: 2
Depth: -38 to -41.5 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 3
Attempt #: 2
Depth: -41.5 to -45 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 3
Attempt #: 2
Depth: -45 to -48 feet MLLW

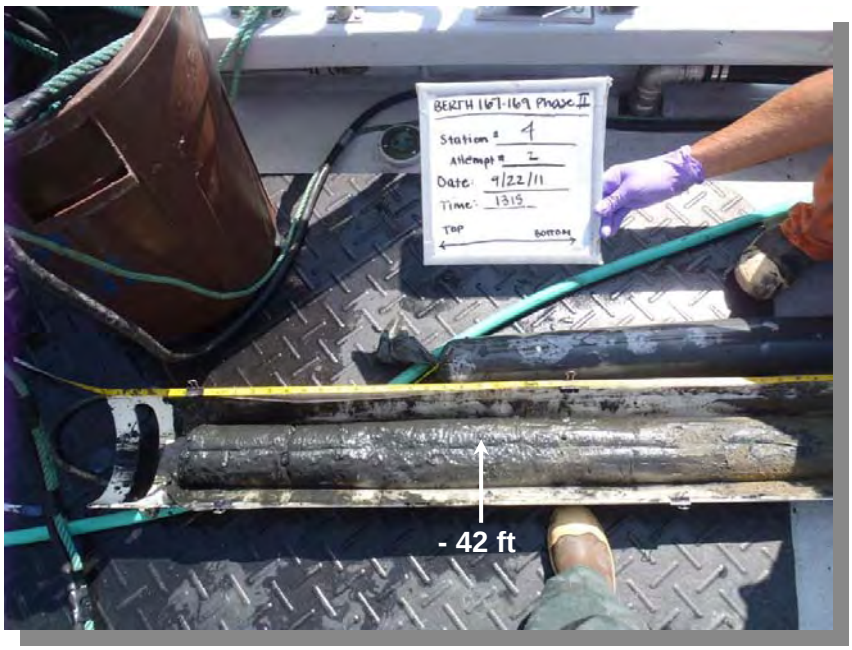
Location: Berth 167-169 Composite Area B
Station #: 3
Attempt #: 2
Depth: -47 to -50 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 1
Depth: -36.2 to -39.2 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 1
Depth: -39.2 to -42.2 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 2
Depth: -36.2 to -38.2 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 2
Depth: -36.7 to -40.2 feet MLLW

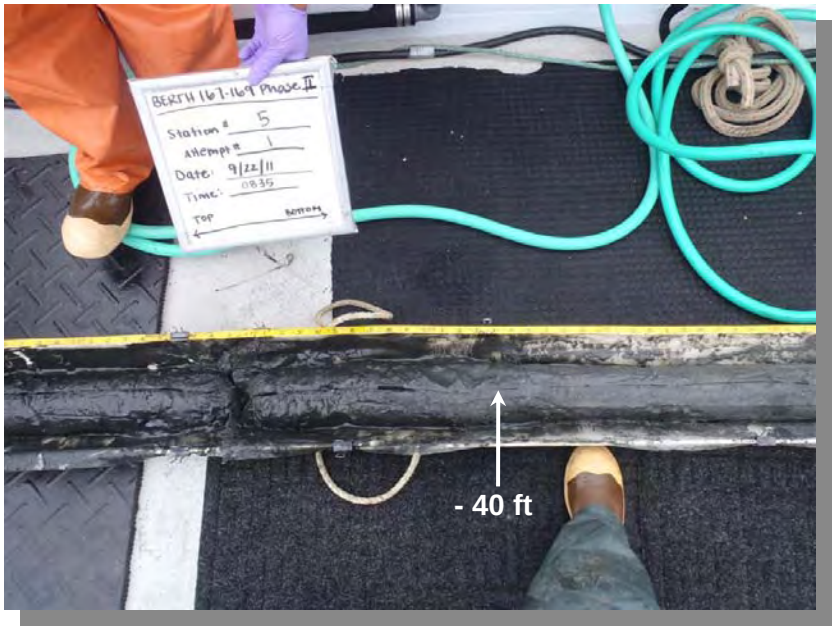


Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 2
Depth: -40.2 to -43.2 feet MLLW

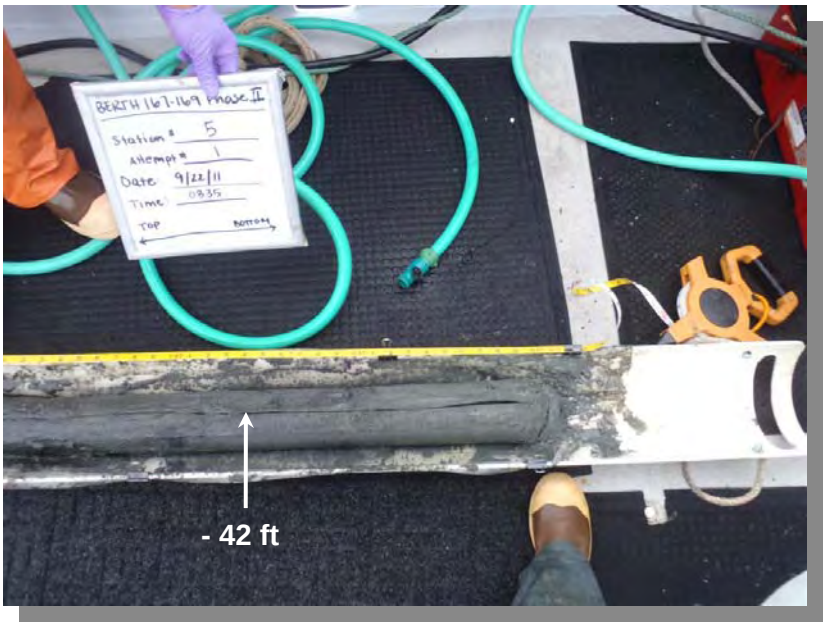
Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 2
Depth: -43.2 to -47.2 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 4
Attempt #: 2
Depth: -47.2 to -49.2 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 5
Attempt #: 1
Depth: -34.6 to -37.6 feet MLLW

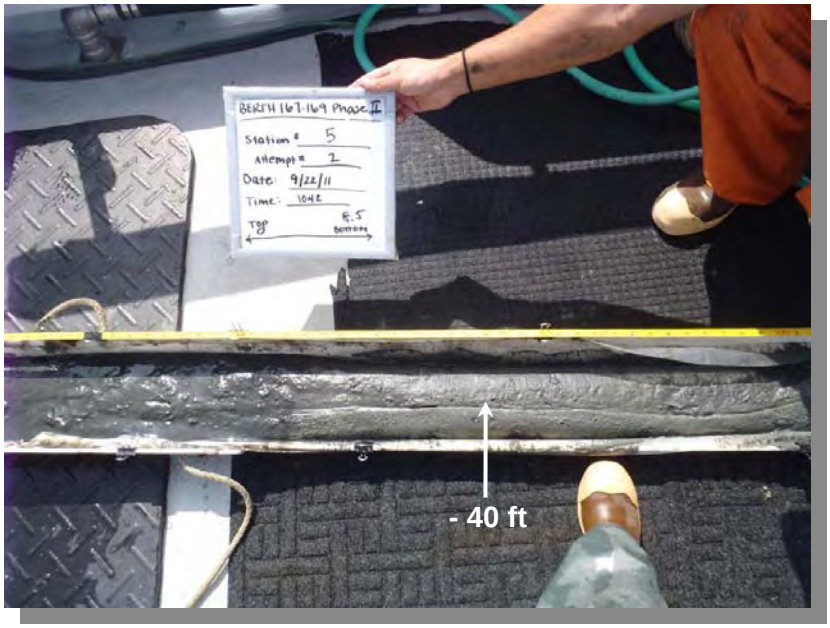


Location: Berth 167-169 Composite Area B
Station #: 5
Attempt #: 1
Depth: -37.6 to -40.6 feet MLLW



Location: Berth 167-169 Composite Area B
Station #: 5
Attempt #: 1
Depth: -40.6 to -43.6 feet MLLW

Location: Berth 167-169 Composite Area B
Station #: 5
Attempt #: 2
Depth: -34.6 to -37.6 feet MLLW



Location: Berth 167-169
Station #: 5
Attempt #: 2
Depth: -37.6 to -40.6 feet MLLW

Location: Berth 167-169
Station #: 5
Attempt #: 2
Depth: -39.7 to -42.6 feet MLLW

Location: Berth 167-169
Station #:5
Attempt #: 2
Depth: -42.6 to 47 feet MLLW

Location: Berth 167-169
Station #:5
Attempt #: 2
Depth: -45.6 to -48.1 feet MLLW

APPENDIX C1
ANALYTICAL CHEMISTRY REPORTS
INITIAL EVENT

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Composite Area A Sediment Chemistry

Calscience
Environmental & Marine Chemistry Laboratories

CALSCIENCE

WORK ORDER NUMBER: 11-06-1553

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Earth & Environmental

Client Project Name: 1015101913 / POLA Berths 167-169

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

Approved for release on 07/8/2011 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, 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. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience
Environmental & Marine Chemistry Laboratories

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Work Order Number: 11-06-1553

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Calscience Environmental Laboratories, Inc.

CASE NARRATIVE

Calscience Work Order No.: 11-06-1553
Project Name: 1015101913 / POLA Berths 167-169

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the sediment samples.

Sample Condition on Receipt

One seawater sample and three sediment samples (housed in 16-oz glass containers) were received for this project on June 23, 2011. The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures. The temperature of the samples upon receipt at the laboratory was 5.5°C. All samples were given laboratory identification numbers, logged into the Laboratory Information Management System (LIMS) and then stored under refrigeration pending sediment chemistry testing and elutriate preparation in accordance with the project SAP.

The SET was prepared using the Elutriate-Sed and Site Water samples, and the results are presented within Calscience Work Order 11-06-1971.

Tests Performed

Dissolved Sulfide by EPA 376.2M
Total Sulfide by EPA 376.2M
Oil and Grease by EPA 413.2M
TRPH by EPA 418.1M
Trace Metals by EPA 6020/7471A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs, Phenols and Phthalates by EPA 8270C SIM
Organotins by Krone et al.
TOC by EPA 9060A
Total Solids by SM 2540B
Ammonia by SM 4500-NH3 B/C (M)

One sample was subcontracted to Core Laboratories in Bakersfield, CA, for Grain Size (by ASTM D422/D4464). The report follows the Calscience results.

Data Summary

The sample results and reporting limits were dry weight corrected.

All samples were homogenized prior to preparation and analysis.

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Holding times

All holding times were met.

Calibration

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

Reporting Limits

All Method Detection Limits were met. The Organotins results were evaluated to the MDL, and where applicable, "J" flags were reported.

Blanks

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

Laboratory Control Samples

A Laboratory Control Sample (LCS) analysis was performed at the required frequencies, and unless otherwise noted, all parameters were within the established control limits.

Matrix Spikes

Matrix spike analyses were performed for each applicable analysis on AMEC project sample Area 1 Comp-T. All parameters were within the established control limits with the following exceptions.

The Zinc matrix spike duplicate recovery was above the established control limit. However, since the Zinc PDS/PDSD and LCS/LCSD recoveries were in control, the data are released with no further action.

The MS, MSD and/or RPDs for Tributyltin and Tetrabutyltin were outside the established control limits due to the elevated concentrations of Organotins as well as matrix interference. However, the results have been flagged with the appropriate qualifiers and are released with no further action since the associated LCS/LCSD recoveries and RPDs were in control.

The MS, MSD and/or RPD values for several Chlorinated Pesticides (by EPA 8081A) fell outside their established control limits due to matrix interference. Yet, since the LCS, LCSD and RPDs were within the control limits, the results are released with no further qualification.

Three of the EPA 8270C SIM PAH matrix spikes, matrix spike duplicates and/or RPDs exceeded the control limits. The results have been flagged with the appropriate qualifiers and are released with no further action since the associated LCS/LCSD recoveries were in control.

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PCB052 and PCB118 (by EPA 8270C SIM) matrix spike duplicate recoveries exceeded the established control limits, but since the MS, LCS and LCSD recoveries were acceptable, the results are released.

Surrogates

Surrogate recoveries for all applicable tests and samples were within the established control limits with the following exceptions.

The Decachlorobiphenyl recovery (by EPA 8081A) was above the established control limit in samples Area 1 Comp B and Area 1 Comp T due to matrix interference. However, the results were confirmed by re-analysis and are released with no further action since the second surrogate, 2,4,5,6-Tetrachloro-m-Xylene, was in control for both samples.

Acronyms

LCS/LCSD- Laboratory Control Sample/Laboratory Control Sample Duplicate
PDS/PDSD- Post Digestion Spike/Post Digestion Spike Duplicate
MS/MSD- Matrix Spike/Matrix Spike Duplicate
ME-Marginal Exceedance
RPD- Relative Percent Difference

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Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 413.2M

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp T	**11-06-1553-1-C**	**06/22/11 15:00**	**Sediment**	**IR #1**	**06/30/11**	**06/30/11 12:54**	**110630L01**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Oil and Grease	150	17	1		mg/kg

Area 1 Comp B	**11-06-1553-2-A**	**06/22/11 15:00**	**Sediment**	**IR #1**	**06/30/11**	**06/30/11 12:54**	**110630L01**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Oil and Grease	260	17	1		mg/kg

Method Blank	**099-07-019-92**	**N/A**	**Solid**	**IR #1**	**06/30/11**	**06/30/11 12:54**	**110630L01**

Parameter	Result	RL	DF	Qual	Units
Oil and Grease	ND	10	1		mg/kg

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 418.1M

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp T	**11-06-1553-1-C**	**06/22/11 15:00**	**Sediment**	**IR #1**	**06/30/11**	**06/30/11 13:48**	**110630L02**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
TRPH	120	17	1		mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp B	**11-06-1553-2-A**	**06/22/11 15:00**	**Sediment**	**IR #1**	**06/30/11**	**06/30/11 13:48**	**110630L02**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
TRPH	190	17	1		mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-07-015-1,769**	**N/A**	**Solid**	**IR #1**	**06/30/11**	**06/30/11 13:48**	**110630L02**

Parameter	Result	RL	DF	Qual	Units
TRPH	ND	10	1		mg/kg

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: 1015101913 / POLA Berths 167-169			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp T	**11-06-1553-1-AC**	**06/22/11 15:00**	**Sediment**	**GC 41**	**06/24/11**	**06/28/11 12:03**	**110624L10**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.7	1		4,4'-DDT	2.3	1.7	1	
Alpha-BHC	ND	1.7	1		Endosulfan I	ND	1.7	1	
Beta-BHC	ND	1.7	1		Endosulfan II	ND	1.7	1	
Delta-BHC	ND	1.7	1		Endosulfan Sulfate	ND	1.7	1	
Gamma-BHC	ND	1.7	1		Endrin	ND	1.7	1	
Chlordane	ND	17	1		Endrin Aldehyde	ND	1.7	1	
Dieldrin	ND	1.7	1		Endrin Ketone	ND	1.7	1	
2,4'-DDD	ND	1.7	1		Heptachlor	ND	1.7	1	
2,4'-DDE	5.2	1.7	1		Heptachlor Epoxide	ND	1.7	1	
2,4'-DDT	ND	1.7	1		Toxaphene	ND	34	1	
4,4'-DDD	9.6	1.7	1		Alpha Chlordane	ND	1.7	1	
4,4'-DDE	31	8.6	5		Gamma Chlordane	ND	1.7	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	101	50-130		Decachlorobiphenyl	152	50-130	2,7

Area 1 Comp B	**11-06-1553-2-A**	**06/22/11 15:00**	**Sediment**	**GC 41**	**06/24/11**	**06/28/11 12:18**	**110624L10**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.7	1		4,4'-DDT	24	17	10	
Alpha-BHC	ND	1.7	1		Endosulfan I	ND	1.7	1	
Beta-BHC	ND	1.7	1		Endosulfan II	ND	1.7	1	
Delta-BHC	ND	1.7	1		Endosulfan Sulfate	ND	1.7	1	
Gamma-BHC	ND	1.7	1		Endrin	ND	1.7	1	
Chlordane	ND	17	1		Endrin Aldehyde	ND	1.7	1	
Dieldrin	ND	1.7	1		Endrin Ketone	ND	1.7	1	
2,4'-DDD	ND	1.7	1		Heptachlor	ND	1.7	1	
2,4'-DDE	18	17	10		Heptachlor Epoxide	ND	1.7	1	
2,4'-DDT	ND	1.7	1		Toxaphene	ND	34	1	
4,4'-DDD	110	17	10		Alpha Chlordane	ND	1.7	1	
4,4'-DDE	85	17	10		Gamma Chlordane	ND	1.7	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	104	50-130		Decachlorobiphenyl	214	50-130	2,7

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Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: 1015101913 / POLA Berths 167-169			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-858-98**	**N/A**	**Solid**	**GC 41**	**06/24/11**	**06/28/11 10:46**	**110624L10**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.0	1		4,4'-DDT	ND	1.0	1	
Alpha-BHC	ND	1.0	1		Endosulfan I	ND	1.0	1	
Beta-BHC	ND	1.0	1		Endosulfan II	ND	1.0	1	
Delta-BHC	ND	1.0	1		Endosulfan Sulfate	ND	1.0	1	
Gamma-BHC	ND	1.0	1		Endrin	ND	1.0	1	
Chlordane	ND	10	1		Endrin Aldehyde	ND	1.0	1	
Dieldrin	ND	1.0	1		Endrin Ketone	ND	1.0	1	
2,4'-DDD	ND	1.0	1		Heptachlor	ND	1.0	1	
2,4'-DDE	ND	1.0	1		Heptachlor Epoxide	ND	1.0	1	
2,4'-DDT	ND	1.0	1		Toxaphene	ND	20	1	
4,4'-DDD	ND	1.0	1		Alpha Chlordane	ND	1.0	1	
4,4'-DDE	ND	1.0	1		Gamma Chlordane	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	101	50-130		Decachlorobiphenyl	96	50-130	

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

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AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp T	**11-06-1553-1-AC**	**06/22/11 15:00**	**Sediment**	**GC/MS MM**	**06/24/11**	**06/29/11 13:50**	**110624L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	17	1		Benzo (b) Fluoranthene	8300	430	25	
2,4,5-Trichlorophenol	ND	17	1		Benzo (g,h,i) Perylene	1600	17	1	
2,4,6-Trichlorophenol	ND	17	1		Benzo (k) Fluoranthene	3100	17	1	
2,4-Dichlorophenol	ND	17	1		Bis(2-Ethylhexyl) Phthalate	580	17	1	
2,4-Dimethylphenol	ND	17	1		Butyl Benzyl Phthalate	ND	17	1	
2,4-Dinitrophenol	ND	860	1		Chrysene	10000	430	25	
2-Chlorophenol	ND	17	1		Di-n-Butyl Phthalate	ND	17	1	
2-Methylnaphthalene	36	17	1		Di-n-Octyl Phthalate	ND	17	1	
2-Methylphenol	ND	17	1		Dibenz (a,h) Anthracene	990	17	1	
2-Nitrophenol	ND	17	1		Diethyl Phthalate	ND	17	1	
3/4-Methylphenol	ND	17	1		Dimethyl Phthalate	ND	17	1	
4,6-Dinitro-2-Methylphenol	ND	860	1		Fluoranthene	1400	17	1	
4-Chloro-3-Methylphenol	ND	17	1		Fluorene	170	17	1	
4-Nitrophenol	ND	860	1		Indeno (1,2,3-c,d) Pyrene	2300	17	1	
Acenaphthene	45	17	1		Naphthalene	72	17	1	
Acenaphthylene	650	17	1		Pentachlorophenol	ND	860	1	
Anthracene	2500	17	1		Phenanthrene	480	17	1	
Benzo (a) Anthracene	4100	430	25		Phenol	ND	17	1	
Benzo (a) Pyrene	9400	430	25		Pyrene	19000	430	25	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	78	32-143		2-Fluorobiphenyl	65	14-146	
2-Fluorophenol	57	15-138		Nitrobenzene-d5	56	18-162	
p-Terphenyl-d14	81	34-148		Phenol-d6	61	17-141	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp B	**11-06-1553-2-A**	**06/22/11 15:00**	**Sediment**	**GC/MS MM**	**06/24/11**	**06/29/11 12:55**	**110624L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	17	1		Benzo (b) Fluoranthene	4400	340	20	
2,4,5-Trichlorophenol	ND	17	1		Benzo (g,h,i) Perylene	910	17	1	
2,4,6-Trichlorophenol	ND	17	1		Benzo (k) Fluoranthene	2600	17	1	
2,4-Dichlorophenol	ND	17	1		Bis(2-Ethylhexyl) Phthalate	210	17	1	
2,4-Dimethylphenol	ND	17	1		Butyl Benzyl Phthalate	ND	17	1	
2,4-Dinitrophenol	ND	850	1		Chrysene	7700	340	20	
2-Chlorophenol	ND	17	1		Di-n-Butyl Phthalate	ND	17	1	
2-Methylnaphthalene	ND	17	1		Di-n-Octyl Phthalate	ND	17	1	
2-Methylphenol	ND	17	1		Dibenz (a,h) Anthracene	390	17	1	
2-Nitrophenol	ND	17	1		Diethyl Phthalate	ND	17	1	
3/4-Methylphenol	ND	17	1		Dimethyl Phthalate	ND	17	1	
4,6-Dinitro-2-Methylphenol	ND	850	1		Fluoranthene	21000	340	20	
4-Chloro-3-Methylphenol	ND	17	1		Fluorene	110	17	1	
4-Nitrophenol	ND	850	1		Indeno (1,2,3-c,d) Pyrene	1300	17	1	
Acenaphthene	46	17	1		Naphthalene	39	17	1	
Acenaphthylene	340	17	1		Pentachlorophenol	ND	850	1	
Anthracene	1700	17	1		Phenanthrene	350	17	1	
Benzo (a) Anthracene	6100	340	20		Phenol	ND	17	1	
Benzo (a) Pyrene	3200	17	1		Pyrene	20000	340	20	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	65	32-143		2-Fluorobiphenyl	71	14-146	
2-Fluorophenol	67	15-138		Nitrobenzene-d5	70	18-162	
p-Terphenyl-d14	82	34-148		Phenol-d6	68	17-141	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-413-323**	**N/A**	**Solid**	**GC/MS MM**	**06/24/11**	**06/29/11 11:32**	**110624L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	10	1		Benzo (b) Fluoranthene	ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
2,4-Dichlorophenol	ND	10	1		Bis(2-Ethylhexyl) Phthalate	ND	10	1	
2,4-Dimethylphenol	ND	10	1		Butyl Benzyl Phthalate	ND	10	1	
2,4-Dinitrophenol	ND	500	1		Chrysene	ND	10	1	
2-Chlorophenol	ND	10	1		Di-n-Butyl Phthalate	ND	10	1	
2-Methylnaphthalene	ND	10	1		Di-n-Octyl Phthalate	ND	10	1	
2-Methylphenol	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
2-Nitrophenol	ND	10	1		Diethyl Phthalate	ND	10	1	
3/4-Methylphenol	ND	10	1		Dimethyl Phthalate	ND	10	1	
4,6-Dinitro-2-Methylphenol	ND	500	1		Fluoranthene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Fluorene	ND	10	1	
4-Nitrophenol	ND	500	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	
Acenaphthene	ND	10	1		Naphthalene	ND	10	1	
Acenaphthylene	ND	10	1		Pentachlorophenol	ND	500	1	
Anthracene	ND	10	1		Phenanthrene	ND	10	1	
Benzo (a) Anthracene	ND	10	1		Phenol	ND	10	1	
Benzo (a) Pyrene	ND	10	1		Pyrene	ND	10	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	71	32-143		2-Fluorobiphenyl	63	14-146	
2-Fluorophenol	39	15-138		Nitrobenzene-d5	37	18-162	
p-Terphenyl-d14	73	34-148		Phenol-d6	54	17-141	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp T	**11-06-1553-1-AC**	**06/22/11 15:00**	**Sediment**	**GC/MS HHH**	**06/24/11**	**06/28/11 16:35**	**110624L09**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.7	1		PCB187	2.2	1.7	1	
PCB018	2.4	1.7	1		PCB183	ND	1.7	1	
PCB028	4.3	1.7	1		PCB126	ND	1.7	1	
PCB052	3.4	1.7	1		PCB128	1.7	1.7	1	
PCB049	14	1.7	1		PCB167	ND	1.7	1	
PCB044	3.5	1.7	1		PCB177	ND	1.7	1	
PCB037	ND	1.7	1		PCB156	2.0	1.7	1	
PCB074	ND	1.7	1		PCB157	2.9	1.7	1	
PCB070	ND	1.7	1		PCB180	3.8	1.7	1	
PCB066	1.8	1.7	1		PCB170	2.4	1.7	1	
PCB101	6.0	1.7	1		PCB201	ND	1.7	1	
PCB099	ND	1.7	1		PCB169	ND	1.7	1	
PCB119	ND	1.7	1		PCB189	ND	1.7	1	
PCB087	2.5	1.7	1		PCB195	ND	1.7	1	
PCB081	ND	1.7	1		PCB194	ND	1.7	1	
PCB110	4.5	1.7	1		PCB206	ND	1.7	1	
PCB151	ND	1.7	1		PCB209	ND	1.7	1	
PCB077	ND	1.7	1		PCB031	ND	1.7	1	
PCB149	5.0	1.7	1		PCB033	3.0	1.7	1	
PCB123	ND	1.7	1		PCB056	ND	1.7	1	
PCB118	5.7	1.7	1		PCB060	ND	1.7	1	
PCB114	ND	1.7	1		PCB095	3.8	1.7	1	
PCB184	ND	1.7	1		PCB097	5.5	1.7	1	
PCB153	6.6	1.7	1		PCB132	ND	1.7	1	
PCB168	ND	1.7	1		PCB141	ND	1.7	1	
PCB105	4.6	1.7	1		PCB174	2.3	1.7	1	
PCB138/158	8.1	3.4	1		PCB203	ND	1.7	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	68	50-125		p-Terphenyl-d14	100	50-125	

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

7440 Lincoln Way, Garden Grove, CA 92841-1427 · TEL:(714) 895-5494 · FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp B	**11-06-1553-2-AC**	**06/22/11 15:00**	**Sediment**	**GC/MS HHH**	**06/24/11**	**06/28/11 17:02**	**110624L09**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.7	1		PCB187	ND	1.7	1	
PCB018	2.6	1.7	1		PCB183	ND	1.7	1	
PCB028	5.2	1.7	1		PCB126	ND	1.7	1	
PCB052	2.4	1.7	1		PCB128	ND	1.7	1	
PCB049	19	1.7	1		PCB167	ND	1.7	1	
PCB044	3.5	1.7	1		PCB177	ND	1.7	1	
PCB037	ND	1.7	1		PCB156	ND	1.7	1	
PCB074	ND	1.7	1		PCB157	2.5	1.7	1	
PCB070	ND	1.7	1		PCB180	2.7	1.7	1	
PCB066	ND	1.7	1		PCB170	ND	1.7	1	
PCB101	4.4	1.7	1		PCB201	ND	1.7	1	
PCB099	ND	1.7	1		PCB169	ND	1.7	1	
PCB119	ND	1.7	1		PCB189	ND	1.7	1	
PCB087	2.4	1.7	1		PCB195	ND	1.7	1	
PCB081	ND	1.7	1		PCB194	ND	1.7	1	
PCB110	3.2	1.7	1		PCB206	ND	1.7	1	
PCB151	ND	1.7	1		PCB209	ND	1.7	1	
PCB077	ND	1.7	1		PCB031	ND	1.7	1	
PCB149	3.4	1.7	1		PCB033	4.3	1.7	1	
PCB123	ND	1.7	1		PCB056	ND	1.7	1	
PCB118	4.8	1.7	1		PCB060	ND	1.7	1	
PCB114	ND	1.7	1		PCB095	2.9	1.7	1	
PCB184	ND	1.7	1		PCB097	5.4	1.7	1	
PCB153	4.3	1.7	1		PCB132	ND	1.7	1	
PCB168	ND	1.7	1		PCB141	ND	1.7	1	
PCB105	5.2	1.7	1		PCB174	ND	1.7	1	
PCB138/158	6.0	3.4	1		PCB203	ND	1.7	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	75	50-125		p-Terphenyl-d14	102	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-343-2**	**N/A**	**Solid**	**GC/MS HHH**	**06/24/11**	**06/28/11 16:08**	**110624L09**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.0	1		PCB187	ND	1.0	1	
PCB018	ND	1.0	1		PCB183	ND	1.0	1	
PCB028	ND	1.0	1		PCB126	ND	1.0	1	
PCB052	ND	1.0	1		PCB128	ND	1.0	1	
PCB049	ND	1.0	1		PCB167	ND	1.0	1	
PCB044	ND	1.0	1		PCB177	ND	1.0	1	
PCB037	ND	1.0	1		PCB156	ND	1.0	1	
PCB074	ND	1.0	1		PCB157	ND	1.0	1	
PCB070	ND	1.0	1		PCB180	ND	1.0	1	
PCB066	ND	1.0	1		PCB170	ND	1.0	1	
PCB101	ND	1.0	1		PCB201	ND	1.0	1	
PCB099	ND	1.0	1		PCB169	ND	1.0	1	
PCB119	ND	1.0	1		PCB189	ND	1.0	1	
PCB087	ND	1.0	1		PCB195	ND	1.0	1	
PCB081	ND	1.0	1		PCB194	ND	1.0	1	
PCB110	ND	1.0	1		PCB206	ND	1.0	1	
PCB151	ND	1.0	1		PCB209	ND	1.0	1	
PCB077	ND	1.0	1		PCB031	ND	1.0	1	
PCB149	ND	1.0	1		PCB033	ND	1.0	1	
PCB123	ND	1.0	1		PCB056	ND	1.0	1	
PCB118	ND	1.0	1		PCB060	ND	1.0	1	
PCB114	ND	1.0	1		PCB095	ND	1.0	1	
PCB184	ND	1.0	1		PCB097	ND	1.0	1	
PCB153	ND	1.0	1		PCB132	ND	1.0	1	
PCB168	ND	1.0	1		PCB141	ND	1.0	1	
PCB105	ND	1.0	1		PCB174	ND	1.0	1	
PCB138/158	ND	2.0	1		PCB203	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	70	50-125		p-Terphenyl-d14	94	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: 1015101913 / POLA Berths 167-169			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp T	**11-06-1553-1-AC**	**06/22/11 15:00**	**Sediment**	**GC/MS Y**	**06/24/11**	**06/28/11 11:32**	**110624L12**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	49	5.2	1.0	1		Tetrabutyltin	7.8	5.2	0.62	1	
Monobutyltin	ND	5.2	1.7	1		Tributyltin	1500	52	5.8	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	98	50-130					

Area 1 Comp B	**11-06-1553-2-A**	**06/22/11 15:00**	**Sediment**	**GC/MS Y**	**06/24/11**	**06/28/11 12:04**	**110624L12**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	38	5.1	1.0	1		Tetrabutyltin	6.1	5.1	0.61	1	
Monobutyltin	2.7	5.1	1.6	1	J	Tributyltin	620	25	2.8	5	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	95	50-130					

Method Blank	**099-07-016-853**	**N/A**	**Solid**	**GC/MS Y**	**06/24/11**	**06/28/11 11:00**	**110624L12**

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	0.60	1		Tetrabutyltin	ND	3.0	0.36	1	
Monobutyltin	ND	3.0	0.97	1		Tributyltin	ND	3.0	0.33	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	91	50-130					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: 1015101913 / POLA Berths 167-169			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp T	**11-06-1553-1-A**	**06/22/11 15:00**	**Sediment**	**ICP/MS 04**	**06/24/11**	**06/24/11 18:34**	**110624L01**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	10.4	0.172	1		Nickel	26.8	0.172	1	
Cadmium	0.499	0.172	1		Selenium	0.647	0.172	1	
Chromium	42.4	0.172	1		Silver	0.286	0.172	1	
Copper	88.8	0.172	1		Zinc	141	1.72	1	
Lead	42.4	0.172	1						

Area 1 Comp B	**11-06-1553-2-A**	**06/22/11 15:00**	**Sediment**	**ICP/MS 04**	**06/24/11**	**06/24/11 18:55**	**110624L01**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	9.03	0.169	1		Nickel	22.7	0.169	1	
Cadmium	0.533	0.169	1		Selenium	0.592	0.169	1	
Chromium	39.5	0.169	1		Silver	0.266	0.169	1	
Copper	79.1	0.169	1		Zinc	138	1.69	1	
Lead	48.1	0.169	1						

Method Blank	**096-10-002-1,987**	**N/A**	**Solid**	**ICP/MS 04**	**06/24/11**	**06/24/11 17:52**	**110624L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.100	1		Nickel	ND	0.100	1	
Cadmium	ND	0.100	1		Selenium	ND	0.100	1	
Chromium	ND	0.100	1		Silver	ND	0.100	1	
Copper	ND	0.100	1		Zinc	ND	1.00	1	
Lead	ND	0.100	1						

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Area 1 Comp T	**11-06-1553-1-A**	**06/22/11 15:00**	**Sediment**	**Mercury**	**06/24/11**	**06/24/11 11:44**	**110624L04**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.277	0.0346	1		mg/kg

Area 1 Comp B	**11-06-1553-2-A**	**06/22/11 15:00**	**Sediment**	**Mercury**	**06/24/11**	**06/24/11 17:16**	**110624L04**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.297	0.0340	1		mg/kg

Method Blank	**099-12-452-209**	**N/A**	**Solid**	**Mercury**	**06/24/11**	**06/24/11 11:38**	**110624L04**

Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0200	1		mg/kg

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 06/23/11
Work Order No: 11-06-1553

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Area 1 Comp T	**11-06-1553-1**	**06/22/11**	**Sediment**

Comment(s): (9) -Results are reported on a dry weight basis

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Sulfide, Total (9)	620	17	100		mg/kg	06/28/11	06/28/11	EPA 376.2M
Sulfide, Dissolved	ND	0.10	1		mg/kg	06/23/11	06/23/11	EPA 376.2M
Carbon, Total Organic (9)	1.4	0.086	1		%	N/A	06/24/11	EPA 9060A
Solids, Total	58.0	0.100	1		%	06/24/11	06/24/11	SM 2540 B
Ammonia (as N) (9)	13	0.34	1		mg/kg	07/05/11	07/05/11	SM 4500-NH3 B/C (M)

Area 1 Comp B	**11-06-1553-2**	**06/22/11**	**Sediment**

Comment(s): (9) -Results are reported on a dry weight basis

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Sulfide, Total (9)	380	8.5	50		mg/kg	06/28/11	06/28/11	EPA 376.2M
Sulfide, Dissolved	ND	0.10	1		mg/kg	06/24/11	06/24/11	EPA 376.2M
Carbon, Total Organic (9)	1.4	0.085	1		%	N/A	06/24/11	EPA 9060A
Solids, Total	59.0	0.100	1		%	06/24/11	06/24/11	SM 2540 B
Ammonia (as N) (9)	16	0.34	1		mg/kg	07/05/11	07/05/11	SM 4500-NH3 B/C (M)

Method Blank		**N/A**	**Solid**

Parameter	Results	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Sulfide, Total	ND	0.10	1		mg/kg	06/28/11	06/28/11	EPA 376.2M
Sulfide, Dissolved	ND	0.020	0.2		mg/kg	06/23/11	06/23/11	EPA 376.2M
Sulfide, Dissolved	ND	0.020	0.2		mg/kg	06/24/11	06/24/11	EPA 376.2M
Carbon, Total Organic	ND	0.050	1		%	N/A	06/24/11	EPA 9060A
Solids, Total	ND	0.100	1		%	06/24/11	06/24/11	SM 2540 B
Ammonia (as N)	ND	0.20	1		mg/kg	07/05/11	07/05/11	SM 4500-NH3 B/C (M)

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/23/11
Work Order No:	11-06-1553
Preparation:	EPA 3050B
Method:	EPA 6020

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area 1 Comp T	**Sediment**	**ICP/MS 04**	**06/24/11**	**06/24/11**	**110624S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	101	103	80-120	1	0-20	
Cadmium	106	106	80-120	0	0-20	
Chromium	100	103	80-120	2	0-20	
Copper	100	111	80-120	4	0-20	
Lead	98	106	80-120	4	0-20	
Nickel	94	102	80-120	5	0-20	
Selenium	96	103	80-120	7	0-20	
Silver	101	99	80-120	1	0-20	
Zinc	90	143	80-120	12	0-20	3

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

AMEC Earth & Environmental		Date Received	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PDSD Batch Number
Area 1 Comp T	**Sediment**	**ICP/MS 04**	**06/24/11**	**06/24/11**	**110624S01**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	101	101	75-125	0	0-20	
Cadmium	103	103	75-125	1	0-20	
Chromium	101	91	75-125	5	0-20	
Copper	91	88	75-125	1	0-20	
Lead	103	103	75-125	0	0-20	
Nickel	101	97	75-125	2	0-20	
Selenium	100	99	75-125	0	0-20	
Silver	91	92	75-125	1	0-20	
Zinc	98	82	75-125	4	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 413.2M

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area 1 Comp T	**Sediment**	**IR #1**	**06/30/11**	**06/30/11**	**110630S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oil and Grease	100	105	55-135	2	0-30	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 418.1M

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area 1 Comp T	**Sediment**	**IR #1**	**06/30/11**	**06/30/11**	**110630S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TRPH	95	94	55-135	1	0-30	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area 1 Comp T	**Sediment**	**Mercury**	**06/24/11**	**06/24/11**	**110624S04**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	88	81	76-136	7	0-16	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/23/11
Work Order No:	11-06-1553
Preparation:	EPA 3545
Method:	Organotins by Krone et al.

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area 1 Comp T	**Sediment**	**GC/MS Y**	**06/24/11**	**06/28/11**	**110624S12**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	97	186	50-130	61	0-20	3,4
Tributyltin	536	1552	50-130	168	0-20	3,4

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/23/11
Work Order No:	11-06-1553
Preparation:	EPA 3545
Method:	EPA 8270C SIM

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area 1 Comp T	**Sediment**	**GC/MS MM**	**06/24/11**	**06/29/11**	**110624S08**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	86	87	40-160	1	0-20	
2,4-Dichlorophenol	90	90	40-160	0	0-20	
2-Methylphenol	90	90	40-160	0	0-20	
2-Nitrophenol	102	102	40-160	0	0-20	
4-Chloro-3-Methylphenol	83	81	40-160	2	0-20	
Acenaphthene	104	103	40-106	1	0-20	
Benzo (a) Pyrene	37	37	17-163	0	0-20	
Chrysene	0	0	17-168	0	0-20	3
Di-n-Butyl Phthalate	98	97	40-160	1	0-20	
Dimethyl Phthalate	88	88	40-160	1	0-20	
Fluoranthene	443	443	26-137	0	0-20	3
Fluorene	113	113	59-121	1	0-20	
Naphthalene	96	96	21-133	1	0-20	
Phenanthrene	100	100	54-120	0	0-20	
Phenol	82	83	40-160	1	0-20	
Pyrene	172	174	6-156	0	0-46	3

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/23/11
Work Order No:	11-06-1553
Preparation:	EPA 3545
Method:	EPA 8081A

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area 1 Comp T	**Sediment**	**GC 41**	**06/24/11**	**06/28/11**	**110624S10**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aldrin	108	107	50-135	1	0-25	
Alpha-BHC	145	135	50-135	7	0-25	3
Beta-BHC	126	112	50-135	12	0-25	
Delta-BHC	125	117	50-135	6	0-25	
Gamma-BHC	102	101	50-135	1	0-25	
Dieldrin	133	128	50-135	4	0-25	
4,4'-DDD	129	107	50-135	9	0-25	
4,4'-DDE	239	59	50-135	36	0-25	3,4
4,4'-DDT	151	54	50-135	76	0-25	3,4
Endosulfan I	102	102	50-135	0	0-25	
Endosulfan II	82	88	50-135	8	0-25	
Endosulfan Sulfate	113	109	50-135	3	0-25	
Endrin	152	144	50-135	5	0-25	3
Endrin Aldehyde	52	55	50-135	5	0-25	
Endrin Ketone	105	31	50-135	27	0-25	3,4
Heptachlor	96	91	50-135	5	0-25	
Heptachlor Epoxide	125	107	50-135	16	0-25	
Methoxychlor	0	0	50-135	40	0-25	3,4
Alpha Chlordane	126	119	50-135	6	0-25	
Gamma Chlordane	0	0	50-135	28	0-25	3,4

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 06/23/11
Work Order No: 11-06-1553
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Area 1 Comp T	**Sediment**	**GC/MS HHH**	**06/24/11**	**06/28/11**	**110624S09**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
PCB008	100	106	50-125	5	0-30	
PCB018	103	110	50-125	7	0-30	
PCB028	108	119	50-125	9	0-30	
PCB052	118	139	50-125	16	0-30	3
PCB044	105	112	50-125	7	0-30	
PCB066	115	123	50-125	7	0-30	
PCB101	110	119	50-125	7	0-30	
PCB077	118	123	50-125	4	0-30	
PCB118	123	128	50-125	4	0-30	3
PCB153	118	115	50-125	3	0-30	
PCB105	113	117	50-125	4	0-30	
PCB187	114	118	50-125	3	0-30	
PCB126	111	115	50-125	3	0-30	
PCB128	107	113	50-125	5	0-30	
PCB180	120	121	50-125	1	0-30	
PCB170	105	107	50-125	2	0-30	
PCB195	111	122	50-125	9	0-30	
PCB206	115	123	50-125	7	0-30	
PCB209	115	124	50-125	8	0-30	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: N/A
Work Order No: 11-06-1553

Project: 1015101913 / POLA Berths 167-169

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	EPA 9060A	Area 1 Comp T	06/24/11	N/A	84	83	75-125	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

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

Date Received: N/A
Work Order No: 11-06-1553

Project: 1015101913 / POLA Berths 167-169

Matrix: Aqueous or Solid

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Sulfide, Total	EPA 376.2M	Area 1 Comp T	06/28/11	360	370	3	0-25	
Sulfide, Dissolved	EPA 376.2M	Area 1 Comp T	06/23/11	ND	ND	NA	0-25	
Sulfide, Dissolved	EPA 376.2M	Area 1 Comp B	06/24/11	ND	ND	NA	0-25	
Solids, Total	SM 2540 B	Area 1 Comp T	06/24/11	58.0	58.5	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-10-002-1,987	**Solid**	**ICP/MS 04**	**06/24/11**	**06/24/11**	**110624L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	101	101	80-120	0	0-20	
Cadmium	107	106	80-120	1	0-20	
Chromium	102	101	80-120	1	0-20	
Copper	106	103	80-120	3	0-20	
Lead	115	114	80-120	1	0-20	
Nickel	109	105	80-120	4	0-20	
Selenium	101	103	80-120	2	0-20	
Silver	97	96	80-120	0	0-20	
Zinc	104	102	80-120	2	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 413.2M

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-07-019-92	**Solid**	**IR #1**	**06/30/11**	**NONE**	**110630L01**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Oil and Grease	100.0	108.1	108	70-130	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 418.1M

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-07-015-1,769	**Solid**	**IR #1**	**06/30/11**	**NONE**	**110630L02**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
TRPH	100.0	106.7	107	70-130	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-452-209	**Solid**	**Mercury**	**06/24/11**	**06/24/11**	**110624L04**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	96	98	82-124	2	0-16	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-016-853	**Solid**	**GC/MS Y**	**06/24/11**	**06/28/11**	**110624L12**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	113	113	50-130	0	0-20	
Tributyltin	87	88	50-130	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-413-323	**Solid**	**GC/MS MM**	**06/24/11**	**06/29/11**	**110624L08**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	64	63	40-160	20-180	2	0-20	
2,4-Dichlorophenol	69	69	40-160	20-180	0	0-20	
2-Methylphenol	66	65	40-160	20-180	1	0-20	
2-Nitrophenol	68	68	40-160	20-180	1	0-20	
4-Chloro-3-Methylphenol	67	67	40-160	20-180	1	0-20	
Acenaphthene	68	68	48-108	38-118	1	0-11	
Benzo (a) Pyrene	76	75	17-163	0-187	1	0-20	
Chrysene	70	69	17-168	0-193	1	0-20	
Di-n-Butyl Phthalate	66	66	40-160	20-180	1	0-20	
Dimethyl Phthalate	63	63	40-160	20-180	1	0-20	
Fluoranthene	67	67	26-137	8-156	0	0-20	
Fluorene	74	74	59-121	49-131	1	0-20	
Naphthalene	68	68	21-133	2-152	0	0-20	
Phenanthrene	67	67	54-120	43-131	0	0-20	
Phenol	63	63	40-160	20-180	0	0-20	
Pyrene	64	64	28-106	15-119	0	0-16	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1553
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-858-98	**Solid**	**GC 41**	**06/24/11**	**06/28/11**	**110624L10**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Aldrin	109	109	50-135	36-149	0	0-25	
Alpha-BHC	118	121	50-135	36-149	3	0-25	
Beta-BHC	117	115	50-135	36-149	2	0-25	
Delta-BHC	122	120	50-135	36-149	1	0-25	
Gamma-BHC	122	120	50-135	36-149	2	0-25	
Dieldrin	113	109	50-135	36-149	3	0-25	
4,4'-DDD	126	126	50-135	36-149	0	0-25	
4,4'-DDE	122	117	50-135	36-149	4	0-25	
4,4'-DDT	118	101	50-135	36-149	15	0-25	
Endosulfan I	108	106	50-135	36-149	2	0-25	
Endosulfan II	114	109	50-135	36-149	5	0-25	
Endosulfan Sulfate	110	108	50-135	36-149	2	0-25	
Endrin	144	125	50-135	36-149	14	0-25	ME
Endrin Aldehyde	86	100	50-135	36-149	14	0-25	
Endrin Ketone	126	110	50-135	36-149	13	0-25	
Heptachlor	118	113	50-135	36-149	5	0-25	
Heptachlor Epoxide	119	107	50-135	36-149	11	0-25	
Methoxychlor	107	96	50-135	36-149	11	0-25	
Alpha Chlordane	113	108	50-135	36-149	4	0-25	
Gamma Chlordane	112	110	50-135	36-149	3	0-25	

Total number of LCS compounds : 20
Total number of ME compounds : 1
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 11-06-1553
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-343-2	**Solid**	**GC/MS HHH**	**06/24/11**	**06/28/11**	**110624L09**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
PCB008	91	95	50-125	38-138	4	0-30	
PCB018	93	98	50-125	38-138	5	0-30	
PCB028	94	100	50-125	38-138	6	0-30	
PCB052	91	98	50-125	38-138	7	0-30	
PCB044	95	101	50-125	38-138	6	0-30	
PCB066	93	102	50-125	38-138	9	0-30	
PCB101	93	102	50-125	38-138	9	0-30	
PCB077	91	101	50-125	38-138	11	0-30	
PCB118	95	105	50-125	38-138	11	0-30	
PCB153	88	99	50-125	38-138	11	0-30	
PCB105	90	100	50-125	38-138	11	0-30	
PCB187	89	99	50-125	38-138	11	0-30	
PCB126	84	94	50-125	38-138	11	0-30	
PCB128	85	96	50-125	38-138	12	0-30	
PCB180	98	101	50-125	38-138	3	0-30	
PCB170	97	96	50-125	38-138	1	0-30	
PCB195	106	104	50-125	38-138	2	0-30	
PCB206	100	104	50-125	38-138	4	0-30	
PCB209	103	104	50-125	38-138	1	0-30	

Total number of LCS compounds : 19
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 11-06-1553

Project: 1015101913 / POLA Berths 167-169

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Carbon, Total Organic	EPA 9060A	099-06-013-597	N/A	06/24/11	92	89	80-120	4	0-20	
Ammonia (as N)	SM 4500-NH3 B	099-12-816-30	07/05/11	07/05/11	97	97	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-06-1553

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
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 (MS) or Matrix Spike Duplicate (MSD) 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 or PES/PESD 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 without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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Calscience Environmental Laboratories, Inc.

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

Date 6/23/2011

Page 1 of 1

WO # / LAB USE ONLY: 06-1553

LABORATORY CLIENT: AMEC

ADDRESS: 9210 Sky Park Court Suite 200

CITY: San Diego STATE: CA ZIP: 92123

TEL: 858-300-4320 E-MAIL: Barry.snyder@amec.com

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID LOG CODE

CLIENT PROJECT NAME / NUMBER: POLA Beach 167-9

P.O. NO.: 10151019 13.0001

PROJECT CONTACT: Barry Snyder

SAMPLER(S): (PRINT) BM/KG

SPECIAL INSTRUCTIONS:
Please report in Dry Weight - See Danielle Consman w/ ?s!
Please confirm Samples/Analysis w/ SAP

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6-C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or (Grain Size)	VOCs (8260) Total Sulfides	Oxygenates (8260) Organotins	En Core / Terra Core Prep (5035) TRPH	SVOCs (8270) Phthalates	Pesticides (8081)	PCBs (8082) Congeners 8270D	PAHs (8310) or (8270) PAHs 8270D	T22 Metals (6010/747X)	Cr(VI) [7196 or 7199 or 218.6]	Air - VOCs (TO-14A) or (TO-15)	Air - TPH (g) [TO-3]	Total Solids	TOC	Total Ammonia
1	~~Comp 1~~ Area 1 Comp T	6/22/11	1500	Sed	1								X	X	X	X	X	X	X	X				X	X	X
2	Area 1 Comp B	6/22/11	1500	Sed	1														X							
3	Elutriate-Sed	6/22/11	1500	Sed	1								X	X	X	X	X	X	X	X				X	X	X
1 4	Area 1 Comp T	6/22/11	1500	Sed	1							X														
4 5	Site Water	6/22/11	1530	H_2O	2								X	X	X	X	X	X	X	X				X	X	X
1 6	Area 1 Comp T MS/MSD	6/22/11	1500	Sed	1								X	X	X	X	X	X	X	X				X	X	X
18	6/22/11																									

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature] N-CA	6/23/11	1315
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

06/01/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-06-1553

SAMPLE RECEIPT FORM

Cooler 1 of 2

CLIENT: AMEC

DATE: 06/23/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 5.0 °C + 0.5 °C (CF) = 5.5 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: PS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: PS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: PS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☑ 2.5 G (COUBES) ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** PS

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** YL

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** YL

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-06-1553

SAMPLE RECEIPT FORM

Cooler 2 of 2

CLIENT: AMEC

DATE: 06/23/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 5.2 °C + 0.5 °C (CF) = 5.7 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: RS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: RS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: RS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☑16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☑#3,4 Z

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** RS

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** YL

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** YL

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Composite Area A Physical Analysis

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.

Subcontractor Analysis Report

Work Order # 11-06-1553

One or more samples in this Work Order have tests that were subcontracted. The subcontract report(s) follows.

For subcontracted tests, please reference the laboratory information noted below.

1 Core Laboratories - Bakersfield,CA ISO 9001:2000, CERT-0014993, ELAP CA # 1247

Particle Size Distribution ASTM D422/4464

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Petroleum Services Division
3437 Landco Dr.
Bakersfield, California 93308
Tel: 661-325-5657
Fax: 661-325-5808
www.corelab.com

July 5, 2011

Danielle Gonsman
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92641-1432

Re: Physical Properties Analyses
Project: 11-06-1553
CL File No: 411052EN

Dear Ms Gonsman:

The final results of the particle-size distribution determinations performed upon the sample submitted from your Project # 11-06-1553 accompany this cover. This electronic version of the report will constitute the final report unless otherwise instructed.

Appropriate ASTM, EPA or API methodologies were used for this project and SOP's are available on request. Samples for this project are currently in storage and will be retained for thirty days past completion of testing at no charge. At the end of thirty days the samples will be disposed. You may contact me regarding continued storage, disposal or return of the samples.

We appreciate the opportunity to be of service to Calscience Environmental Laboratories, Inc. and trust these data will prove beneficial in the development of this project. Please do not hesitate to contact us (661-325-5657) if you have any questions regarding these results, or if we can be of any additional service.

Sincerely,
Core Laboratories

Jeffry L. Smith

Jeffry L. Smith
ARP Supervisor

CLB Listed NYSE

SIEVE and LASER PARTICLE SIZE SUMMARY

(METHODOLOGY: ASTM D422/D4464M)

Petroleum Services

Co. : Calscience
Proj. No. : 11-06-1553

Core Lab File No : 57111-411052EN
Date : 7/5/2011

Sample ID	Grain Size Description (Mean from Folk)	Median Grain Size, mm	Component Percentages								Silt & Clay
			Gravel	Sand Size						Clay	
				VCoarse	Coarse	Medium	Fine	VFine	Silt		
Area 1 Comp T	silt	0.02	0.00	0.02	1.04	5.92	12.36	9.04	60.46	13.48	73.9

Company : Calscience
Proj. No. : 11-06-1553

C.L. File No. : 57111-411052EN
Date : 7/5/2011

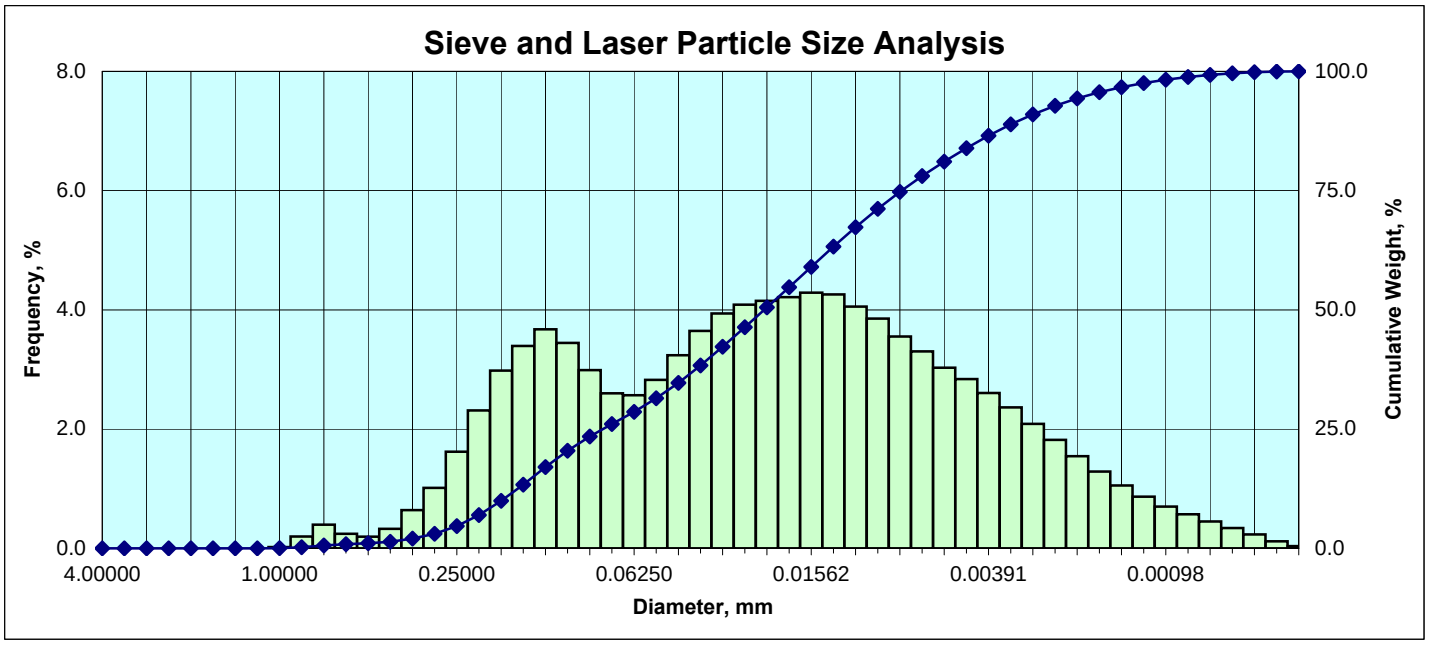
Sieve and Laser Particle Size Analysis (Metric)

Sample ID/ Depth(ft)	Component Percentages								Percentiles										Sorting Statistics (Folk)				
	Gravel	Sand					Fines		Particle Diameter (mm)										Median	Mean	Sorting	Skew.	Kurt.
		vcgr	cgr	mgr	fgr	vfgr	silt	clay	5	10	16	25	40	50	75	84	90	95	mm	mm	ϕ		
Area 1 Comp T	0.00	0.02	1.04	3.61	12.36	9.04	60.46	13.48	0.2417 fgr	0.1756 fgr	0.1312 fgr	0.0799 vfgr	0.0344 silt	0.0225 silt	0.0077 silt	0.0046 silt	0.0030 clay	0.0018 clay	0.023 silt	0.024 silt	2.279 v. Poor	-0.010 near sym	0.860 platykurtic

** Particle-size distribution pattern precludes calculation of these statistical parameters

Company : Calscience
Proj. No. : 11-06-1553

CL File No. : 57111-411052EN
Sample ID : Area 1 Comp T



Particle Size Distribution

	Diameter [US Mesh]	Diameter [in.]	Diameter [mm]	Diameter [ϕ]	Weight % [Incl.]	Weight % [Cum.]
Granule	5	0.157480	4.00000	-2.00	0.000	0.00
	6	0.132425	3.36359	-1.75	0.000	0.00
	7	0.111355	2.82843	-1.50	0.000	0.00
	8	0.093638	2.37841	-1.25	0.000	0.00
	10	0.078740	2.00000	-1.00	0.000	0.00
V Crse Sand	12	0.066212	1.68179	-0.75	0.000	0.00
	14	0.055678	1.41421	-0.50	0.000	0.00
	16	0.046819	1.18921	-0.25	0.000	0.00
	18	0.039370	1.00000	0.00	0.020	0.02
Coarse Sand	20	0.033106	0.84090	0.25	0.198	0.22
	25	0.027839	0.70711	0.50	0.398	0.62
	30	0.023410	0.59460	0.75	0.245	0.86
	35	0.019685	0.50000	1.00	0.197	1.06
Medium Sand	40	0.016553	0.42045	1.25	0.329	1.39
	45	0.013919	0.35355	1.50	0.642	2.03
	50	0.011705	0.29730	1.75	1.014	3.04
	60	0.009843	0.25000	2.00	1.622	4.67
Fine Sand	70	0.008277	0.21022	2.25	2.314	6.98
	80	0.006960	0.17678	2.50	2.981	9.96
	100	0.005852	0.14865	2.75	3.394	13.35
	120	0.004921	0.12500	3.00	3.673	17.03
V. Fine Sand	140	0.004138	0.10511	3.25	3.447	20.47
	170	0.003480	0.08839	3.50	2.988	23.46
	200	0.002926	0.07433	3.75	2.600	26.06
Silt	230	0.002461	0.06250	4.00	2.567	28.63
	270	0.002069	0.05256	4.25	2.826	31.46
	325	0.001740	0.04419	4.50	3.239	34.69
	400	0.001463	0.03716	4.75	3.647	38.34
	450	0.001230	0.03125	5.00	3.941	42.28
	500	0.001035	0.02628	5.25	4.087	46.37
	635	0.000870	0.02210	5.50	4.151	50.52
		0.000732	0.01858	5.75	4.214	54.73
		0.000615	0.01562	6.00	4.288	59.02
		0.000517	0.01314	6.25	4.259	63.28
		0.000435	0.01105	6.50	4.054	67.33
		0.000366	0.00929	6.75	3.852	71.19
		0.000308	0.00781	7.00	3.553	74.74
		0.000259	0.00657	7.25	3.304	78.04
		0.000217	0.00552	7.50	3.029	81.07
		0.000183	0.00465	7.75	2.841	83.91
		0.000154	0.00391	8.00	2.605	86.52
Clay		0.000129	0.00328	8.25	2.365	88.88
		0.000109	0.00276	8.50	2.087	90.97
		0.000091	0.00232	8.75	1.819	92.79
		0.000077	0.00195	9.00	1.545	94.34
		0.000065	0.00164	9.25	1.287	95.62
		0.000054	0.00138	9.50	1.056	96.68
		0.000046	0.00116	9.75	0.867	97.54
		0.000038	0.00098	10.00	0.701	98.25
		0.000032	0.00082	10.25	0.571	98.82
		0.000027	0.00069	10.50	0.452	99.27
		0.000023	0.00058	10.75	0.342	99.61
		0.000019	0.00049	11.00	0.235	99.85
		0.000016	0.00041	11.25	0.118	99.96
		0.000015	0.00038	11.50	0.037	100.00

Sorting Statistics (Folk)

Parameter	Trask	Inman	Folk
Median	**Silt sized**		
(in)	0.0009	0.0009	0.0009
(mm)	0.0225	0.0225	0.0225
Mean	**Silt sized**		
(in)	0.0017	0.0010	0.0009
(mm)	0.0438	0.0246	0.0239
Sorting	**V. Poor**		
	3.219	0.188	2.279
Skewness	**Near symmetrical**		
	1.101	0.047	-0.010
Kurtosis	**Platykurtic**		
	0.209	0.465	0.860

Component Percentages

Gravel	Sand	Silt	Clay	Silt + Clay
0.00	26.06	60.46	13.48	73.94

Percentile [Weight, %]	Particle Diameter [in.]	Particle Diameter [mm]	Particle Diameter [phi]
5	0.0095	0.2417	2.0484
10	0.0069	0.1756	2.5100
16	0.0052	0.1312	2.9299
25	0.0031	0.0799	3.6465
40	0.0014	0.0344	4.8595
50	0.0009	0.0225	5.4719
75	0.0003	0.0077	7.0198
84	0.0002	0.0046	7.7576
90	0.0001	0.0030	8.3800
95	0.0001	0.0018	9.1232

** Distribution pattern precludes calculation of these statistical parameters.

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: CORE LABORATORIES

CHAIN OF CUSTODY RECORD

DATE: 06/23/11
PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: dgonsman@calscience.com

CLIENT PROJECT NAME / NUMBER: 11-06-1553
P.O. NO.: 11-06-1553
PROJECT CONTACT: Danielle Gonsman
TEMP BLANK:
LAB USE ONLY:
SAMPLER(S): (PRINT)

TURNAROUND TIME
___SAME DAY ___24 HR ___48HR ___72 HR ___5 DAYS X STANDARD

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Contact prior to subcontracting samples
*500, 1000, and 2000 psi

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	GRAIN SIZE
	Area 1 Comp T	06/22/11	1500	sed	1	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date	Time
W Cbatn (CALSCIENCE)	GSO # 516849470	6/23/11	1630
	Tracy Bishop	6/24/11	10:10AM

Composite Area B Sediment Chemistry

Calscience
Environmental & Marine Chemistry Laboratories

CALSCIENCE

WORK ORDER NUMBER: 11-06-0516

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Earth & Environmental

Client Project Name: 1015101913 / POLA Berths 167-169

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

Approved for release on 06/28/2011 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, 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. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience
Environmental & Marine Chemistry Laboratories

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Work Order Number: 11-06-0516

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Calscience Environmental Laboratories, Inc.

CASE NARRATIVE

Calscience Work Order No.: 11-06-0516
Project Name: 1015101913 / POLA Berths 167-169

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the sediment samples.

Sample Condition on Receipt

One seawater sample and seven sediment samples (housed in 16-oz glass containers) were received for this project on June 8, 2011. The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures. The temperature of the samples upon receipt at the laboratory was 3.7°C. All samples were given laboratory identification numbers, logged into the Laboratory Information Management System (LIMS) and then stored under refrigeration pending sediment chemistry testing and elutriate preparation in accordance with the project SAP.

The SET was prepared using the Elutriate Sed-Comp-B-Top and the Site Water samples, and the results are presented within Calscience Work Order 11-06-0773.

Tests Performed

Dissolved Sulfide by EPA 376.2M
Total Sulfide by EPA 376.2M
Oil and Grease by EPA 413.2M
TRPH by EPA 418.1M
Trace Metals by EPA 6020/7471A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs, Phenols and Phthalates by EPA 8270C SIM
TOC by EPA 9060A
Total Solids by SM 2540B
Ammonia by SM 4500-NH3 B/C (M)
Organotins by Krone et al.

One sample was subcontracted to Core Laboratories in Bakersfield, CA, for Grain Size (by ASTM D422/D4464). The report follows the Calscience results.

Data Summary

The sample results and reporting limits were dry weight corrected.

All samples were homogenized prior to preparation and analysis.

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Holding times

All holding times were met.

Calibration

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

Reporting Limits

All Method Detection Limits were met. The Organotins and TRPH results were evaluated to the MDL, and where applicable, "J" flags were reported.

Blanks

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

Laboratory Control Samples

A Laboratory Control Sample (LCS) analysis was performed at the required frequencies, and unless otherwise noted, all parameters were within the established control limits.

Matrix Spikes

Matrix spike analyses were performed for each applicable analysis on AMEC project samples Composite B Top and Station 4. All parameters were within the established control limits with the following exceptions.

The Copper, Silver and Zinc MS, MSD and/or RPDs were outside the control limits. However, since the associated PDS/PDSD recoveries, LCS/LCSD recoveries and RPDs were in control, the data are released with no further action.

Four of the EPA 8081A Chlorinated Pesticides matrix spikes, matrix spike duplicates and/or RPDs exceeded the control limits due to matrix interference. Yet, since all the LCS, LCSD and RPDs were within the control limits, the results are released with no further qualification.

The MS and/or MSD recoveries for several PAHs (by EPA 8270C SIM) fell outside their established control limits. The results have been flagged with the appropriate qualifiers and are released with no further action since the associated LCS/LCSD recoveries were in control.

PCB052 and PCB118 (by EPA 8270C SIM) matrix spike and matrix spike duplicate recoveries exceeded the established control limits, but since the LCS and LCSD recoveries were acceptable, the results are released.

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Surrogates

Surrogate recoveries for all applicable tests and samples were within the established control limits.

Lab Duplicate

A laboratory duplicate was performed on samples Composite B- Bottom and Station 3. Due to limited sample available, the Composite B- Bottom Lab Dup was only analyzed for Oil & Grease, TRPH, TOC, Total Solids and Metals. The Station 3 Lab Dup was tested for Total Solids and PAHs.

Acronyms

LCS/LCSD- Laboratory Control Sample/Laboratory Control Sample Duplicate
PDS/PDSD- Post Digestion Spike/Post Digestion Spike Duplicate
MS/MSD- Matrix Spike/Matrix Spike Duplicate
ME-Marginal Exceedance
RPD- Relative Percent Difference

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 9060A

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**TOC 5**	**N/A**	**06/09/11 18:11**	**B0609TOCL1**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Carbon, Total Organic	1.5	0.080	1		%

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**TOC 5**	**N/A**	**06/09/11 18:11**	**B0609TOCL1**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Carbon, Total Organic	1.4	0.073	1		%

Composite B- Bottom (LAB DUPLICATE)	**11-06-0516-10-A**	**06/07/11 16:45**	**Sediment**	**TOC 5**	**N/A**	**06/09/11 18:11**	**B0609TOCL1**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Carbon, Total Organic	1.4	0.073	1		%

Method Blank	**099-06-013-592**	**N/A**	**Solid**	**TOC 5**	**N/A**	**06/09/11 18:11**	**B0609TOCL1**

Parameter	Result	RL	DF	Qual	Units
Carbon, Total Organic	ND	0.050	1		%

Return to Contents

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 376.2M

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**N/A**	**06/11/11**	**06/11/11 15:10**	**B0611SB1**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Sulfide, Total	400	8.0	50		mg/kg

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**N/A**	**06/11/11**	**06/11/11 15:10**	**B0611SB1**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Sulfide, Total	180	7.3	50		mg/kg

Method Blank	**099-10-035-19**	**N/A**	**Solid**	**N/A**	**06/11/11**	**06/11/11 15:10**	**B0611SB1**

Parameter	Result	RL	DF	Qual	Units
Sulfide, Total	ND	0.10	1		mg/kg

Return to Contents

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 4500-NH3 B/C (M)

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**BUR05**	**06/14/11**	**06/14/11 16:45**	**B0614NH3L3**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Ammonia (as N)	13	0.32	1		mg/kg

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**BUR05**	**06/14/11**	**06/14/11 16:45**	**B0614NH3L3**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Ammonia (as N)	20	0.29	1		mg/kg

Method Blank	**099-12-816-29**	**N/A**	**Solid**	**BUR05**	**06/14/11**	**06/14/11 16:45**	**B0614NH3L3**

Parameter	Result	RL	DF	Qual	Units
Ammonia (as N)	ND	0.20	1		mg/kg

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 376.2M

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**N/A**	**06/08/11**	**06/08/11 14:30**	**B0608DSB2**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Sulfide, Dissolved	ND	0.16	1		mg/kg

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**N/A**	**06/08/11**	**06/08/11 14:30**	**B0608DSB2**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Sulfide, Dissolved	ND	0.15	1		mg/kg

Method Blank	**099-14-095-13**	**N/A**	**Solid**	**N/A**	**06/08/11**	**06/08/11 14:30**	**B0608DSB2**

Parameter	Result	RL	DF	Qual	Units
Sulfide, Dissolved	ND	0.020	0.2		mg/kg

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3	**11-06-0516-1-A**	**06/07/11 13:35**	**Sediment**	**N/A**	**06/10/11**	**06/10/11 18:30**	**B0610TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	57.1	0.100	1		%

Station 4	11-06-0516-2-A	06/07/11 15:00	Sediment	N/A	06/10/11	06/10/11 18:30	B0610TSB1

Parameter	Result	RL	DF	Qual	Units
Solids, Total	62.0	0.100	1		%

Station 5	11-06-0516-3-A	06/07/11 16:00	Sediment	N/A	06/10/11	06/10/11 18:30	B0610TSB1

Parameter	Result	RL	DF	Qual	Units
Solids, Total	64.1	0.100	1		%

Composite B- Top	11-06-0516-4-A	06/07/11 16:45	Sediment	N/A	06/10/11	06/10/11 18:30	B0610TSB1

Parameter	Result	RL	DF	Qual	Units
Solids, Total	62.6	0.100	1		%

Composite B- Bottom	11-06-0516-5-A	06/07/11 16:45	Sediment	N/A	06/10/11	06/10/11 18:30	B0610TSB1

Parameter	Result	RL	DF	Qual	Units
Solids, Total	68.5	0.100	1		%

Station 3 (LAB DUPLICATE)	11-06-0516-9-A	06/07/11 13:35	Sediment	N/A	06/10/11	06/10/11 18:30	B0610TSB1

Parameter	Result	RL	DF	Qual	Units
Solids, Total	56.9	0.100	1		%

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Bottom (LAB DUPLICATE)	**11-06-0516-10-A**	**06/07/11 16:45**	**Sediment**	**N/A**	**06/10/11**	**06/10/11 18:30**	**B0610TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	68.5	0.100	1		%

Method Blank	**099-05-019-1,663**	**N/A**	**Solid**	**N/A**	**06/10/11**	**06/10/11 18:30**	**B0610TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	ND	0.100	1		%

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 413.2M

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**IR #1**	**06/14/11**	**06/14/11 12:18**	**110614L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	490	32	13	2		mg/kg

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**IR #1**	**06/14/11**	**06/14/11 12:18**	**110614L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	790	29	12	2		mg/kg

Composite B- Bottom (LAB DUPLICATE)	**11-06-0516-10-A**	**06/07/11 16:45**	**Sediment**	**IR #1**	**06/14/11**	**06/14/11 12:18**	**110614L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	930	29	12	2		mg/kg

Method Blank	**099-07-019-90**	**N/A**	**Solid**	**IR #1**	**06/14/11**	**06/14/11 12:18**	**110614L02**

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	Units
Oil and Grease	ND	10	4.0	1		mg/kg

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 418.1M

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**IR #1**	**06/14/11**	**06/14/11 00:00**	**110614L03**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	410	32	13	2		mg/kg

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**IR #1**	**06/14/11**	**06/14/11 18:51**	**110614L03**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	670	29	12	2		mg/kg

Composite B- Bottom (LAB DUPLICATE)	**11-06-0516-10-A**	**06/07/11 16:45**	**Sediment**	**IR #1**	**06/14/11**	**06/14/11 18:51**	**110614L03**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	850	29	12	2		mg/kg

Method Blank	**099-07-015-1,767**	**N/A**	**Solid**	**IR #1**	**06/14/11**	**06/14/11 00:00**	**110614L03**

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	Units
TRPH	ND	10	4.0	1		mg/kg

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: 1015101913 / POLA Berths 167-169			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**GC/MS Y**	**06/10/11**	**06/14/11 12:13**	**110610L09**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	14	4.8	0.96	1		Tetrabutyltin	ND	4.8	0.57	1	
Monobutyltin	ND	4.8	1.6	1		Tributyltin	14	4.8	0.53	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	79	50-130	

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**GC/MS Y**	**06/10/11**	**06/14/11 12:45**	**110610L09**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	37	4.4	0.88	1		Tetrabutyltin	ND	4.4	0.52	1	
Monobutyltin	ND	4.4	1.4	1		Tributyltin	56	4.4	0.49	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	73	50-130	

Method Blank	**099-07-016-845**	**N/A**	**Solid**	**GC/MS Y**	**06/10/11**	**06/14/11 11:41**	**110610L09**

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	0.60	1		Tetrabutyltin	ND	3.0	0.36	1	
Monobutyltin	ND	3.0	0.97	1		Tributyltin	ND	3.0	0.33	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	77	50-130	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**GC/MS MM**	**06/10/11**	**06/14/11 15:36**	**110610L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	16	1		Benzo (b) Fluoranthene	4300	160	10	
2,4,5-Trichlorophenol	ND	16	1		Benzo (g,h,i) Perylene	950	16	1	
2,4,6-Trichlorophenol	ND	16	1		Benzo (k) Fluoranthene	2200	16	1	
2,4-Dichlorophenol	ND	16	1		Bis(2-Ethylhexyl) Phthalate	290	16	1	
2,4-Dimethylphenol	ND	16	1		Butyl Benzyl Phthalate	52	16	1	
2,4-Dinitrophenol	ND	800	1		Chrysene	5700	160	10	
2-Chlorophenol	ND	16	1		Di-n-Butyl Phthalate	ND	16	1	
2-Methylnaphthalene	19	16	1		Di-n-Octyl Phthalate	ND	16	1	
2-Methylphenol	ND	16	1		Dibenz (a,h) Anthracene	380	16	1	
2-Nitrophenol	ND	16	1		Diethyl Phthalate	ND	16	1	
3/4-Methylphenol	ND	16	1		Dimethyl Phthalate	150	16	1	
4,6-Dinitro-2-Methylphenol	ND	800	1		Fluoranthene	9100	160	10	
4-Chloro-3-Methylphenol	ND	16	1		Fluorene	150	16	1	
4-Nitrophenol	ND	800	1		Indeno (1,2,3-c,d) Pyrene	1300	16	1	
Acenaphthene	27	16	1		Naphthalene	17	16	1	
Acenaphthylene	180	16	1		Pentachlorophenol	ND	800	1	
Anthracene	2100	16	1		Phenanthrene	440	16	1	
Benzo (a) Anthracene	3100	16	1		Phenol	37	16	1	
Benzo (a) Pyrene	3200	16	1		Pyrene	11000	160	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	59	32-143		2-Fluorobiphenyl	54	14-146	
2-Fluorophenol	43	15-138		Nitrobenzene-d5	43	18-162	
p-Terphenyl-d14	67	34-148		Phenol-d6	46	17-141	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**GC/MS MM**	**06/10/11**	**06/14/11 16:02**	**110610L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	83	15	1		Benzo (b) Fluoranthene	3700	150	10	
2,4,5-Trichlorophenol	ND	15	1		Benzo (g,h,i) Perylene	740	15	1	
2,4,6-Trichlorophenol	ND	15	1		Benzo (k) Fluoranthene	1900	15	1	
2,4-Dichlorophenol	ND	15	1		Bis(2-Ethylhexyl) Phthalate	530	15	1	
2,4-Dimethylphenol	ND	15	1		Butyl Benzyl Phthalate	92	15	1	
2,4-Dinitrophenol	ND	730	1		Chrysene	5700	150	10	
2-Chlorophenol	ND	15	1		Di-n-Butyl Phthalate	ND	15	1	
2-Methylnaphthalene	36	15	1		Di-n-Octyl Phthalate	ND	15	1	
2-Methylphenol	ND	15	1		Dibenz (a,h) Anthracene	370	15	1	
2-Nitrophenol	ND	15	1		Diethyl Phthalate	ND	15	1	
3/4-Methylphenol	ND	15	1		Dimethyl Phthalate	91	15	1	
4,6-Dinitro-2-Methylphenol	ND	730	1		Fluoranthene	6900	150	10	
4-Chloro-3-Methylphenol	ND	15	1		Fluorene	400	15	1	
4-Nitrophenol	ND	730	1		Indeno (1,2,3-c,d) Pyrene	1000	15	1	
Acenaphthene	570	15	1		Naphthalene	130	15	1	
Acenaphthylene	250	15	1		Pentachlorophenol	ND	730	1	
Anthracene	1700	15	1		Phenanthrene	1400	15	1	
Benzo (a) Anthracene	3900	150	10		Phenol	27	15	1	
Benzo (a) Pyrene	3800	150	10		Pyrene	10000	150	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	89	32-143		2-Fluorobiphenyl	70	14-146	
2-Fluorophenol	59	15-138		Nitrobenzene-d5	65	18-162	
p-Terphenyl-d14	82	34-148		Phenol-d6	61	17-141	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-413-320**	**N/A**	**Solid**	**GC/MS MM**	**06/10/11**	**06/14/11 13:26**	**110610L05**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
1-Methylnaphthalene	ND	10	1		Benzo (b) Fluoranthene	ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
2,4-Dichlorophenol	ND	10	1		Bis(2-Ethylhexyl) Phthalate	ND	10	1	
2,4-Dimethylphenol	ND	10	1		Butyl Benzyl Phthalate	ND	10	1	
2,4-Dinitrophenol	ND	500	1		Chrysene	ND	10	1	
2-Chlorophenol	ND	10	1		Di-n-Butyl Phthalate	ND	10	1	
2-Methylnaphthalene	ND	10	1		Di-n-Octyl Phthalate	ND	10	1	
2-Methylphenol	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
2-Nitrophenol	ND	10	1		Diethyl Phthalate	ND	10	1	
3/4-Methylphenol	ND	10	1		Dimethyl Phthalate	ND	10	1	
4,6-Dinitro-2-Methylphenol	ND	500	1		Fluoranthene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Fluorene	ND	10	1	
4-Nitrophenol	ND	500	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	
Acenaphthene	ND	10	1		Naphthalene	ND	10	1	
Acenaphthylene	ND	10	1		Pentachlorophenol	ND	500	1	
Anthracene	ND	10	1		Phenanthrene	ND	10	1	
Benzo (a) Anthracene	ND	10	1		Phenol	ND	10	1	
Benzo (a) Pyrene	ND	10	1		Pyrene	ND	10	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	58	32-143		2-Fluorobiphenyl	61	14-146	
2-Fluorophenol	44	15-138		Nitrobenzene-d5	32	18-162	
p-Terphenyl-d14	77	34-148		Phenol-d6	53	17-141	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**GC 51**	**06/10/11**	**06/14/11 14:42**	**110610L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.6	1		4,4'-DDT	ND	1.6	1	
Alpha-BHC	ND	1.6	1		Endosulfan I	ND	1.6	1	
Beta-BHC	ND	1.6	1		Endosulfan II	ND	1.6	1	
Delta-BHC	ND	1.6	1		Endosulfan Sulfate	ND	1.6	1	
Gamma-BHC	ND	1.6	1		Endrin	ND	1.6	1	
Chlordane	ND	16	1		Endrin Aldehyde	ND	1.6	1	
Dieldrin	ND	1.6	1		Endrin Ketone	ND	1.6	1	
2,4'-DDD	ND	1.6	1		Heptachlor	ND	1.6	1	
2,4'-DDE	5.7	1.6	1		Heptachlor Epoxide	ND	1.6	1	
2,4'-DDT	ND	1.6	1		Toxaphene	ND	32	1	
4,4'-DDD	ND	1.6	1		Alpha Chlordane	ND	1.6	1	
4,4'-DDE	29	8.0	5		Gamma Chlordane	ND	1.6	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	87	50-130		Decachlorobiphenyl	108	50-130	

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**GC 51**	**06/10/11**	**06/14/11 13:58**	**110610L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.5	1		4,4'-DDT	ND	1.5	1	
Alpha-BHC	ND	1.5	1		Endosulfan I	ND	1.5	1	
Beta-BHC	ND	1.5	1		Endosulfan II	ND	1.5	1	
Delta-BHC	ND	1.5	1		Endosulfan Sulfate	ND	1.5	1	
Gamma-BHC	ND	1.5	1		Endrin	ND	1.5	1	
Chlordane	ND	15	1		Endrin Aldehyde	ND	1.5	1	
Dieldrin	ND	1.5	1		Endrin Ketone	ND	1.5	1	
2,4'-DDD	ND	1.5	1		Heptachlor	ND	1.5	1	
2,4'-DDE	15	15	10		Heptachlor Epoxide	ND	1.5	1	
2,4'-DDT	ND	1.5	1		Toxaphene	ND	29	1	
4,4'-DDD	ND	1.5	1		Alpha Chlordane	ND	1.5	1	
4,4'-DDE	81	15	10		Gamma Chlordane	ND	1.5	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	77	50-130		Decachlorobiphenyl	115	50-130	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: 1015101913 / POLA Berths 167-169			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-858-94**	**N/A**	**Solid**	**GC 51**	**06/10/11**	**06/14/11 13:29**	**110610L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.0	1		4,4'-DDT	ND	1.0	1	
Alpha-BHC	ND	1.0	1		Endosulfan I	ND	1.0	1	
Beta-BHC	ND	1.0	1		Endosulfan II	ND	1.0	1	
Delta-BHC	ND	1.0	1		Endosulfan Sulfate	ND	1.0	1	
Gamma-BHC	ND	1.0	1		Endrin	ND	1.0	1	
Chlordane	ND	10	1		Endrin Aldehyde	ND	1.0	1	
Dieldrin	ND	1.0	1		Endrin Ketone	ND	1.0	1	
2,4'-DDD	ND	1.0	1		Heptachlor	ND	1.0	1	
2,4'-DDE	ND	1.0	1		Heptachlor Epoxide	ND	1.0	1	
2,4'-DDT	ND	1.0	1		Toxaphene	ND	20	1	
4,4'-DDD	ND	1.0	1		Alpha Chlordane	ND	1.0	1	
4,4'-DDE	ND	1.0	1		Gamma Chlordane	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	95	50-130		Decachlorobiphenyl	93	50-130	

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

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Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3	**11-06-0516-1-A**	**06/07/11 13:35**	**Sediment**	**GC/MS BBB**	**06/10/11**	**06/14/11 15:57**	**110610L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	30	18	1		Dibenz (a,h) Anthracene	390	18	1	
Acenaphthylene	380	18	1		Fluoranthene	1900	180	10	
Anthracene	1400	180	10		Fluorene	99	18	1	
Benzo (a) Anthracene	1900	180	10		Indeno (1,2,3-c,d) Pyrene	1200	180	10	
Benzo (a) Pyrene	4300	180	10		2-Methylnaphthalene	18	18	1	
Benzo (b) Fluoranthene	5600	180	10		1-Methylnaphthalene	ND	18	1	
Benzo (g,h,i) Perylene	1000	180	10		Naphthalene	ND	18	1	
Benzo (k) Fluoranthene	3600	180	10		Phenanthrene	370	18	1	
Chrysene	3600	180	10		Pyrene	8300	180	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	82	14-146		Nitrobenzene-d5	90	18-162	
p-Terphenyl-d14	87	34-148					

Station 4	**11-06-0516-2-A**	**06/07/11 15:00**	**Sediment**	**GC/MS BBB**	**06/10/11**	**06/14/11 16:22**	**110610L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	570	16	1		Dibenz (a,h) Anthracene	460	16	1	
Acenaphthylene	750	16	1		Fluoranthene	19000	810	50	
Anthracene	3600	810	50		Fluorene	580	16	1	
Benzo (a) Anthracene	4500	810	50		Indeno (1,2,3-c,d) Pyrene	1400	810	50	
Benzo (a) Pyrene	4800	810	50		2-Methylnaphthalene	64	16	1	
Benzo (b) Fluoranthene	6600	810	50		1-Methylnaphthalene	54	16	1	
Benzo (g,h,i) Perylene	1200	810	50		Naphthalene	120	16	1	
Benzo (k) Fluoranthene	5500	810	50		Phenanthrene	3800	810	50	
Chrysene	8200	810	50		Pyrene	17000	810	50	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	80	14-146		Nitrobenzene-d5	87	18-162	
p-Terphenyl-d14	92	34-148					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 5	**11-06-0516-3-A**	**06/07/11 16:00**	**Sediment**	**GC/MS BBB**	**06/10/11**	**06/14/11 15:33**	**110610L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	28	16	1		Dibenz (a,h) Anthracene	140	16	1	
Acenaphthylene	140	16	1		Fluoranthene	2000	160	10	
Anthracene	360	16	1		Fluorene	46	16	1	
Benzo (a) Anthracene	530	16	1		Indeno (1,2,3-c,d) Pyrene	410	16	1	
Benzo (a) Pyrene	1600	160	10		2-Methylnaphthalene	ND	16	1	
Benzo (b) Fluoranthene	2100	160	10		1-Methylnaphthalene	ND	16	1	
Benzo (g,h,i) Perylene	380	16	1		Naphthalene	24	16	1	
Benzo (k) Fluoranthene	1500	160	10		Phenanthrene	170	16	1	
Chrysene	1300	160	10		Pyrene	3500	160	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	77	14-146		Nitrobenzene-d5	90	18-162	
p-Terphenyl-d14	83	34-148					

Station 3 (LAB DUPLICATE)	**11-06-0516-9-A**	**06/07/11 13:35**	**Sediment**	**GC/MS BBB**	**06/10/11**	**06/14/11 15:08**	**110610L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	24	18	1		Dibenz (a,h) Anthracene	290	18	1	
Acenaphthylene	260	18	1		Fluoranthene	830	18	1	
Anthracene	780	18	1		Fluorene	70	18	1	
Benzo (a) Anthracene	580	18	1		Indeno (1,2,3-c,d) Pyrene	800	18	1	
Benzo (a) Pyrene	3100	180	10		2-Methylnaphthalene	44	18	1	
Benzo (b) Fluoranthene	3800	180	10		1-Methylnaphthalene	25	18	1	
Benzo (g,h,i) Perylene	730	18	1		Naphthalene	27	18	1	
Benzo (k) Fluoranthene	2900	180	10		Phenanthrene	250	18	1	
Chrysene	2000	180	10		Pyrene	6600	180	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	78	14-146		Nitrobenzene-d5	85	18-162	
p-Terphenyl-d14	85	34-148					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-097-45**	**N/A**	**Solid**	**GC/MS BBB**	**06/10/11**	**06/14/11 12:38**	**110610L06**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
Acenaphthylene	ND	10	1		Fluoranthene	ND	10	1	
Anthracene	ND	10	1		Fluorene	ND	10	1	
Benzo (a) Anthracene	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	
Benzo (a) Pyrene	ND	10	1		2-Methylnaphthalene	ND	10	1	
Benzo (b) Fluoranthene	ND	10	1		1-Methylnaphthalene	ND	10	1	
Benzo (g,h,i) Perylene	ND	10	1		Naphthalene	ND	10	1	
Benzo (k) Fluoranthene	ND	10	1		Phenanthrene	ND	10	1	
Chrysene	ND	10	1		Pyrene	ND	10	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	77	14-146		Nitrobenzene-d5	81	18-162	
p-Terphenyl-d14	78	34-148					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**GC/MS HHH**	**06/10/11**	**06/14/11 13:18**	**110610L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.6	1		PCB187	1.8	1.6	1	
PCB018	ND	1.6	1		PCB183	ND	1.6	1	
PCB028	ND	1.6	1		PCB126	ND	1.6	1	
PCB052	4.0	1.6	1		PCB128	ND	1.6	1	
PCB049	16	1.6	1		PCB167	ND	1.6	1	
PCB044	3.8	1.6	1		PCB177	ND	1.6	1	
PCB037	ND	1.6	1		PCB156	ND	1.6	1	
PCB074	ND	1.6	1		PCB157	2.0	1.6	1	
PCB070	2.1	1.6	1		PCB180	3.4	1.6	1	
PCB066	2.1	1.6	1		PCB170	1.7	1.6	1	
PCB101	6.4	1.6	1		PCB201	ND	1.6	1	
PCB099	2.3	1.6	1		PCB169	ND	1.6	1	
PCB119	ND	1.6	1		PCB189	ND	1.6	1	
PCB087	2.7	1.6	1		PCB195	ND	1.6	1	
PCB081	ND	1.6	1		PCB194	ND	1.6	1	
PCB110	5.5	1.6	1		PCB206	ND	1.6	1	
PCB151	ND	1.6	1		PCB209	ND	1.6	1	
PCB077	ND	1.6	1		PCB031	4.4	1.6	1	
PCB149	5.0	1.6	1		PCB033	2.1	1.6	1	
PCB123	ND	1.6	1		PCB056	ND	1.6	1	
PCB118	5.4	1.6	1		PCB060	ND	1.6	1	
PCB114	ND	1.6	1		PCB095	4.0	1.6	1	
PCB184	ND	1.6	1		PCB097	5.2	1.6	1	
PCB153	7.2	1.6	1		PCB132	ND	1.6	1	
PCB168	ND	1.6	1		PCB141	1.7	1.6	1	
PCB105	3.0	1.6	1		PCB174	1.7	1.6	1	
PCB138/158	8.4	3.2	1		PCB203	ND	1.6	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	118	50-125		p-Terphenyl-d14	118	50-125	

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

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Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**GC/MS HHH**	**06/10/11**	**06/14/11 13:45**	**110610L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.5	1		PCB187	5.9	1.5	1	
PCB018	4.5	1.5	1		PCB183	2.6	1.5	1	
PCB028	ND	1.5	1		PCB126	ND	1.5	1	
PCB052	12	1.5	1		PCB128	5.7	1.5	1	
PCB049	26	1.5	1		PCB167	ND	1.5	1	
PCB044	9.9	1.5	1		PCB177	2.2	1.5	1	
PCB037	ND	1.5	1		PCB156	4.1	1.5	1	
PCB074	3.6	1.5	1		PCB157	5.1	1.5	1	
PCB070	7.5	1.5	1		PCB180	11	1.5	1	
PCB066	6.6	1.5	1		PCB170	5.9	1.5	1	
PCB101	26	1.5	1		PCB201	2.9	1.5	1	
PCB099	8.3	1.5	1		PCB169	ND	1.5	1	
PCB119	ND	1.5	1		PCB189	ND	1.5	1	
PCB087	10	1.5	1		PCB195	ND	1.5	1	
PCB081	ND	1.5	1		PCB194	2.5	1.5	1	
PCB110	22	1.5	1		PCB206	1.5	1.5	1	
PCB151	4.6	1.5	1		PCB209	ND	1.5	1	
PCB077	ND	1.5	1		PCB031	12	1.5	1	
PCB149	18	1.5	1		PCB033	3.3	1.5	1	
PCB123	3.9	1.5	1		PCB056	2.7	1.5	1	
PCB118	23	1.5	1		PCB060	ND	1.5	1	
PCB114	ND	1.5	1		PCB095	15	1.5	1	
PCB184	ND	1.5	1		PCB097	14	1.5	1	
PCB153	28	1.5	1		PCB132	ND	1.5	1	
PCB168	ND	1.5	1		PCB141	4.6	1.5	1	
PCB105	14	1.5	1		PCB174	5.7	1.5	1	
PCB138/158	32	2.9	1		PCB203	1.9	1.5	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	85	50-125		p-Terphenyl-d14	111	50-125	

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

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Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-343-1**	**N/A**	**Solid**	**GC/MS HHH**	**06/10/11**	**06/14/11 12:50**	**110610L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.0	1		PCB187	ND	1.0	1	
PCB018	ND	1.0	1		PCB183	ND	1.0	1	
PCB028	ND	1.0	1		PCB126	ND	1.0	1	
PCB052	ND	1.0	1		PCB128	ND	1.0	1	
PCB049	ND	1.0	1		PCB167	ND	1.0	1	
PCB044	ND	1.0	1		PCB177	ND	1.0	1	
PCB037	ND	1.0	1		PCB156	ND	1.0	1	
PCB074	ND	1.0	1		PCB157	ND	1.0	1	
PCB070	ND	1.0	1		PCB180	ND	1.0	1	
PCB066	ND	1.0	1		PCB170	ND	1.0	1	
PCB101	ND	1.0	1		PCB201	ND	1.0	1	
PCB099	ND	1.0	1		PCB169	ND	1.0	1	
PCB119	ND	1.0	1		PCB189	ND	1.0	1	
PCB087	ND	1.0	1		PCB195	ND	1.0	1	
PCB081	ND	1.0	1		PCB194	ND	1.0	1	
PCB110	ND	1.0	1		PCB206	ND	1.0	1	
PCB151	ND	1.0	1		PCB209	ND	1.0	1	
PCB077	ND	1.0	1		PCB031	ND	1.0	1	
PCB149	ND	1.0	1		PCB033	ND	1.0	1	
PCB123	ND	1.0	1		PCB056	ND	1.0	1	
PCB118	ND	1.0	1		PCB060	ND	1.0	1	
PCB114	ND	1.0	1		PCB095	ND	1.0	1	
PCB184	ND	1.0	1		PCB097	ND	1.0	1	
PCB153	ND	1.0	1		PCB132	ND	1.0	1	
PCB168	ND	1.0	1		PCB141	ND	1.0	1	
PCB105	ND	1.0	1		PCB174	ND	1.0	1	
PCB138/158	ND	2.0	1		PCB203	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	106	50-125		p-Terphenyl-d14	105	50-125	

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

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Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: 1015101913 / POLA Berths 167-169			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**ICP/MS 04**	**06/10/11**	**06/10/11 20:06**	**110610L01**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	6.31	0.160	1		Nickel	17.3	0.160	1	
Cadmium	0.266	0.160	1		Selenium	0.304	0.160	1	
Chromium	27.2	0.160	1		Silver	ND	0.160	1	
Copper	101	0.160	1		Zinc	104	1.60	1	
Lead	18.6	0.160	1						

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**ICP/MS 04**	**06/10/11**	**06/10/11 14:29**	**110610L01**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	9.19	0.146	1		Nickel	20.5	0.146	1	
Cadmium	0.733	0.146	1		Selenium	0.593	0.146	1	
Chromium	55.4	0.146	1		Silver	0.347	0.146	1	
Copper	72.6	0.146	1		Zinc	147	1.46	1	
Lead	56.6	0.146	1						

Composite B- Bottom (LAB DUPLICATE)	**11-06-0516-10-A**	**06/07/11 16:45**	**Sediment**	**ICP/MS 04**	**06/10/11**	**06/10/11 14:33**	**110610L01**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	8.99	0.146	1		Nickel	21.4	0.146	1	
Cadmium	0.766	0.146	1		Selenium	0.598	0.146	1	
Chromium	69.1	0.146	1		Silver	0.356	0.146	1	
Copper	71.4	0.146	1		Zinc	145	1.46	1	
Lead	59.1	0.146	1						

Method Blank	**096-10-002-1,970**	**N/A**	**Solid**	**ICP/MS 04**	**06/10/11**	**06/10/11 13:04**	**110610L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.100	1		Nickel	ND	0.100	1	
Cadmium	ND	0.100	1		Selenium	ND	0.100	1	
Chromium	ND	0.100	1		Silver	ND	0.100	1	
Copper	ND	0.100	1		Zinc	ND	1.00	1	
Lead	ND	0.100	1						

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project: 1015101913 / POLA Berths 167-169

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite B- Top	**11-06-0516-4-A**	**06/07/11 16:45**	**Sediment**	**Mercury**	**06/09/11**	**06/09/11 16:38**	**110609L05**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.312	0.0320	1		mg/kg

Composite B- Bottom	**11-06-0516-5-A**	**06/07/11 16:45**	**Sediment**	**Mercury**	**06/09/11**	**06/09/11 16:41**	**110609L05**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.478	0.0293	1		mg/kg

Composite B- Bottom (LAB DUPLICATE)	**11-06-0516-10-A**	**06/07/11 16:45**	**Sediment**	**Mercury**	**06/09/11**	**06/09/11 16:43**	**110609L05**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.475	0.0293	1		mg/kg

Method Blank	**099-12-452-205-A**	**N/A**	**Solid**	**Mercury**	**06/09/11**	**06/09/11 16:27**	**110609L05**

Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0200	1		mg/kg

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/08/11
Work Order No:	11-06-0516
Preparation:	EPA 3050B
Method:	EPA 6020

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**ICP/MS 04**	**06/10/11**	**06/10/11**	**110610S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	96	97	80-120	1	0-20	
Cadmium	98	99	80-120	2	0-20	
Chromium	107	103	80-120	2	0-20	
Copper	180	42	80-120	38	0-20	3,4
Lead	95	96	80-120	1	0-20	
Nickel	98	96	80-120	2	0-20	
Selenium	99	102	80-120	2	0-20	
Silver	32	38	80-120	17	0-20	3
Zinc	124	90	80-120	9	0-20	3

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

AMEC Earth & Environmental		Date Received	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PDSD Batch Number
Composite B- Top	**Sediment**	**ICP/MS 04**	**06/10/11**	**06/10/11**	**110610S01**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	93	92	75-125	1	0-20	
Cadmium	94	94	75-125	0	0-20	
Chromium	95	99	75-125	2	0-20	
Copper	103	97	75-125	2	0-20	
Lead	91	95	75-125	3	0-20	
Nickel	92	94	75-125	2	0-20	
Selenium	99	95	75-125	4	0-20	
Silver	88	87	75-125	1	0-20	
Zinc	101	94	75-125	2	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 9060A

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**TOC 5**	**N/A**	**06/09/11**	**B0609TOCS1**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	89	96	75-125	5	0-25	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 376.2M

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
Composite B- Top	**Sediment**	**N/A**	**06/11/11**	**06/11/11**	**B0611SD1**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Sulfide, Total	250	250	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 376.2M

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
Composite B- Top	**Sediment**	**N/A**	**06/08/11**	**06/08/11**	**B0608DSD2**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Sulfide, Dissolved	ND	ND	NA	0-25	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
Composite B- Top	**Sediment**	**N/A**	**06/10/11**	**06/10/11**	**B0610TSD1**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Solids, Total	62.6	61.9	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 413.2M

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**IR #1**	**06/14/11**	**06/14/11**	**110614S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oil and Grease	87	78	55-135	4	0-30	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 418.1M

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**IR #1**	**06/14/11**	**06/14/11**	**110614S03**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TRPH	78	85	55-135	4	0-30	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**Mercury**	**06/09/11**	**06/09/11**	**110609S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	85	82	76-136	3	0-16	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/08/11
Work Order No:	11-06-0516
Preparation:	EPA 3545
Method:	Organotins by Krone et al.

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**GC/MS Y**	**06/10/11**	**06/14/11**	**110610S09**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	103	97	50-130	6	0-20	
Tributyltin	82	76	50-130	7	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**GC/MS MM**	**06/10/11**	**06/14/11**	**110610S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	77	78	40-160	1	0-20	
2,4-Dichlorophenol	80	82	40-160	2	0-20	
2-Methylphenol	71	70	40-160	2	0-20	
2-Nitrophenol	88	92	40-160	5	0-20	
4-Chloro-3-Methylphenol	73	72	40-160	0	0-20	
Acenaphthene	96	94	40-106	2	0-20	
Benzo (a) Pyrene	17	19	17-163	1	0-20	
Chrysene	0	0	17-168	0	0-20	3
Di-n-Butyl Phthalate	59	60	40-160	1	0-20	
Dimethyl Phthalate	67	67	40-160	0	0-20	
Fluoranthene	0	0	26-137	6	0-20	3
Fluorene	98	96	59-121	1	0-20	
Naphthalene	76	75	21-133	1	0-20	
Phenanthrene	170	172	54-120	1	0-20	3
Phenol	64	64	40-160	1	0-20	
Pyrene	0	0	6-156	2	0-46	3

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/08/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**GC 51**	**06/10/11**	**06/14/11**	**110610S08**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aldrin	98	78	50-135	23	0-25	
Alpha-BHC	123	114	50-135	8	0-25	
Beta-BHC	129	126	50-135	2	0-25	
Delta-BHC	108	114	50-135	6	0-25	
Gamma-BHC	82	86	50-135	5	0-25	
Dieldrin	88	95	50-135	8	0-25	
4,4'-DDD	137	143	50-135	4	0-25	3
4,4'-DDE	57	105	50-135	11	0-25	
4,4'-DDT	108	37	50-135	55	0-25	3,4
Endosulfan I	71	74	50-135	3	0-25	
Endosulfan II	75	81	50-135	8	0-25	
Endosulfan Sulfate	88	82	50-135	7	0-25	
Endrin	98	88	50-135	12	0-25	
Endrin Aldehyde	68	65	50-135	6	0-25	
Endrin Ketone	127	117	50-135	8	0-25	
Heptachlor	71	76	50-135	6	0-25	
Heptachlor Epoxide	111	120	50-135	7	0-25	
Methoxychlor	81	38	50-135	32	0-25	3,4
Alpha Chlordane	94	100	50-135	7	0-25	
Gamma Chlordane	135	91	50-135	39	0-25	4

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/08/11
Work Order No:	11-06-0516
Preparation:	EPA 3545
Method:	EPA 8270C SIM PAHs

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Station 4	**Sediment**	**GC/MS BBB**	**06/10/11**	**06/14/11**	**110610S06**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Acenaphthene	32	29	40-160	1	0-20	3
Acenaphthylene	54	57	40-160	0	0-20	
Anthracene	0	0	40-160	2	0-20	3
Benzo (a) Anthracene	466	458	40-160	0	0-20	3
Benzo (a) Pyrene	419	373	40-160	1	0-20	3
Benzo (b) Fluoranthene	139	123	40-160	0	0-20	
Benzo (g,h,i) Perylene	128	117	40-160	1	0-20	
Benzo (k) Fluoranthene	94	0	40-160	17	0-20	3
Chrysene	0	0	40-160	1	0-20	3
Dibenz (a,h) Anthracene	112	111	40-160	0	0-20	
Fluoranthene	0	0	40-160	3	0-20	3
Fluorene	51	51	40-160	0	0-20	
Indeno (1,2,3-c,d) Pyrene	151	141	40-160	1	0-20	
2-Methylnaphthalene	102	106	40-160	3	0-20	
1-Methylnaphthalene	98	108	40-160	7	0-20	
Naphthalene	104	105	40-160	1	0-20	
Phenanthrene	0	0	40-160	1	0-20	3
Pyrene	0	0	40-160	2	0-46	3

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/08/11
Work Order No:	11-06-0516
Preparation:	EPA 3545
Method:	EPA 8270C SIM PCB Congeners

Project 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Composite B- Top	**Sediment**	**GC/MS HHH**	**06/10/11**	**06/14/11**	**110610S07**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
PCB008	107	106	50-125	2	0-30	
PCB018	114	107	50-125	6	0-30	
PCB028	121	113	50-125	8	0-30	
PCB052	127	126	50-125	1	0-30	3
PCB044	109	102	50-125	7	0-30	
PCB066	125	120	50-125	4	0-30	
PCB101	114	112	50-125	1	0-30	
PCB077	124	118	50-125	5	0-30	
PCB118	132	126	50-125	4	0-30	3
PCB153	117	112	50-125	4	0-30	
PCB105	120	117	50-125	2	0-30	
PCB187	115	110	50-125	4	0-30	
PCB126	111	109	50-125	2	0-30	
PCB128	119	105	50-125	13	0-30	
PCB180	125	111	50-125	11	0-30	
PCB170	109	102	50-125	6	0-30	
PCB195	112	107	50-125	5	0-30	
PCB206	118	108	50-125	9	0-30	
PCB209	120	121	50-125	1	0-30	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-10-002-1,970	**Solid**	**ICP/MS 04**	**06/10/11**	**06/10/11**	**110610L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	94	91	80-120	3	0-20	
Cadmium	100	100	80-120	0	0-20	
Chromium	105	106	80-120	1	0-20	
Copper	99	95	80-120	4	0-20	
Lead	111	109	80-120	2	0-20	
Nickel	103	105	80-120	1	0-20	
Selenium	109	105	80-120	4	0-20	
Silver	93	95	80-120	2	0-20	
Zinc	102	99	80-120	4	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 9060A

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-06-013-592	**Solid**	**TOC 5**	**N/A**	**06/09/11**	**B0609TOCL1**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	109	110	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 4500-NH3 B/C (M)

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-816-29	**Solid**	**BUR05**	**06/14/11**	**06/14/11**	**B0614NH3L3**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Ammonia (as N)	99	98	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	EPA 413.2M

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-019-90	**Solid**	**IR #1**	**06/14/11**	**06/14/11**	**110614L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oil and Grease	109	107	70-130	2	0-30	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 418.1
		Method:	EPA 418.1M

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-015-1,762	**Solid**	**IR #1**	**06/14/11**	**06/14/11**	**110614L03**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TRPH	110	106	70-130	4	0-30	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-452-205	**Solid**	**Mercury**	**06/09/11**	**06/09/11**	**110609L05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	100	101	82-124	1	0-16	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-07-016-845	**Solid**	**GC/MS Y**	**06/14/11**	**14JUN007.rr**	**110610L09**

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Tetrabutyltin	100.0	110.8	111	50-130	
Tributyltin	100.0	94.84	95	50-130	

RPD - Relative Percent Difference , CL - Control Limit

Return to Contents

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-413-320	**Solid**	**GC/MS MM**	**06/10/11**	**06/14/11**	**110610L05**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	68	68	40-160	20-180	0	0-20	
2,4-Dichlorophenol	67	68	40-160	20-180	1	0-20	
2-Methylphenol	53	53	40-160	20-180	0	0-20	
2-Nitrophenol	41	44	40-160	20-180	6	0-20	
4-Chloro-3-Methylphenol	58	59	40-160	20-180	1	0-20	
Acenaphthene	72	72	48-108	38-118	1	0-11	
Benzo (a) Pyrene	82	81	17-163	0-187	0	0-20	
Chrysene	74	73	17-168	0-193	0	0-20	
Di-n-Butyl Phthalate	68	71	40-160	20-180	3	0-20	
Dimethyl Phthalate	64	65	40-160	20-180	2	0-20	
Fluoranthene	72	73	26-137	8-156	1	0-20	
Fluorene	77	76	59-121	49-131	1	0-20	
Naphthalene	64	64	21-133	2-152	1	0-20	
Phenanthrene	72	73	54-120	43-131	1	0-20	
Phenol	46	46	40-160	20-180	1	0-20	
Pyrene	68	68	28-106	15-119	0	0-16	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-858-94	**Solid**	**GC 51**	**06/10/11**	**06/14/11**	**110610L08**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Aldrin	79	85	50-135	36-149	8	0-25	
Alpha-BHC	84	88	50-135	36-149	5	0-25	
Beta-BHC	89	91	50-135	36-149	2	0-25	
Delta-BHC	87	89	50-135	36-149	3	0-25	
Gamma-BHC	89	92	50-135	36-149	4	0-25	
Dieldrin	81	88	50-135	36-149	8	0-25	
4,4'-DDD	84	92	50-135	36-149	9	0-25	
4,4'-DDE	87	93	50-135	36-149	7	0-25	
4,4'-DDT	88	91	50-135	36-149	3	0-25	
Endosulfan I	79	86	50-135	36-149	8	0-25	
Endosulfan II	84	91	50-135	36-149	8	0-25	
Endosulfan Sulfate	77	82	50-135	36-149	7	0-25	
Endrin	89	93	50-135	36-149	5	0-25	
Endrin Aldehyde	68	71	50-135	36-149	5	0-25	
Endrin Ketone	83	91	50-135	36-149	9	0-25	
Heptachlor	86	88	50-135	36-149	3	0-25	
Heptachlor Epoxide	73	76	50-135	36-149	4	0-25	
Methoxychlor	84	86	50-135	36-149	3	0-25	
Alpha Chlordane	82	88	50-135	36-149	7	0-25	
Gamma Chlordane	82	88	50-135	36-149	7	0-25	

Total number of LCS compounds : 20
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0516
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-097-45	**Solid**	**GC/MS BBB**	**06/10/11**	**06/14/11**	**110610L06**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Acenaphthene	88	87	48-108	38-118	1	0-11	
Acenaphthylene	86	87	40-160	20-180	1	0-20	
Anthracene	77	76	40-160	20-180	0	0-20	
Benzo (a) Anthracene	88	89	40-160	20-180	1	0-20	
Benzo (a) Pyrene	92	92	40-160	20-180	0	0-20	
Benzo (b) Fluoranthene	92	93	40-160	20-180	0	0-20	
Benzo (g,h,i) Perylene	85	85	40-160	20-180	1	0-20	
Benzo (k) Fluoranthene	93	94	40-160	20-180	1	0-20	
Chrysene	91	91	40-160	20-180	0	0-20	
Dibenz (a,h) Anthracene	87	87	40-160	20-180	0	0-20	
Fluoranthene	89	89	40-160	20-180	0	0-20	
Fluorene	90	89	40-160	20-180	1	0-20	
Indeno (1,2,3-c,d) Pyrene	88	89	40-160	20-180	1	0-20	
2-Methylnaphthalene	86	85	40-160	20-180	1	0-20	
1-Methylnaphthalene	94	94	40-160	20-180	0	0-20	
Naphthalene	90	91	40-160	20-180	1	0-20	
Phenanthrene	89	89	40-160	20-180	0	0-20	
Pyrene	88	90	40-160	20-180	2	0-16	

Total number of LCS compounds : 18
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 11-06-0516
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: 1015101913 / POLA Berths 167-169

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-343-1	**Solid**	**GC/MS HHH**	**06/10/11**	**06/14/11**	**110610L07**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
PCB008	101	102	50-125	38-138	1	0-30	
PCB018	102	104	50-125	38-138	2	0-30	
PCB028	100	102	50-125	38-138	3	0-30	
PCB052	98	100	50-125	38-138	2	0-30	
PCB044	100	104	50-125	38-138	3	0-30	
PCB066	102	101	50-125	38-138	0	0-30	
PCB101	99	100	50-125	38-138	0	0-30	
PCB077	106	105	50-125	38-138	1	0-30	
PCB118	108	103	50-125	38-138	4	0-30	
PCB153	98	95	50-125	38-138	3	0-30	
PCB105	99	102	50-125	38-138	4	0-30	
PCB187	100	99	50-125	38-138	0	0-30	
PCB126	93	96	50-125	38-138	3	0-30	
PCB128	98	97	50-125	38-138	1	0-30	
PCB180	98	97	50-125	38-138	0	0-30	
PCB170	93	97	50-125	38-138	4	0-30	
PCB195	103	104	50-125	38-138	1	0-30	
PCB206	101	105	50-125	38-138	4	0-30	
PCB209	109	109	50-125	38-138	0	0-30	

Total number of LCS compounds : 19
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-06-0516

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
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 (MS) or Matrix Spike Duplicate (MSD) 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 or PES/PESD 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 without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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Calscience Environmental Laboratories, Inc.

☒ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: 0 6 - 0 5 1 6

Date 6/8/2011

Page 1 of 1

LABORATORY CLIENT: AMEC

ADDRESS: 9210 Sky Park Courte Suite 200

CITY: San Diego STATE: CA ZIP: 92123

TEL: 858-300-4320

E-MAIL: Barry.Snyder@amec.com

CLIENT PROJECT NAME / NUMBER: 1015701913

P.O. NO.:

PROJECT CONTACT: Barry Snyder

SAMPLER(S): (PRINT) Brent Merdian

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF

GLOBAL ID

LOG CODE

SPECIAL INSTRUCTIONS: Report Sed. in Dry weight
Please contact Barry Snyder with any questions.

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	~~TPH (g) or GRO~~	~~TPH (d) or DRO or (C6-C36) or (C6-C44)~~	~~TPH~~	~~BTEX / MTBE (8260) or ( )~~	~~VOCs (8260)~~ TRPH 418.1	~~Oxygenates (8260)~~ Organotins	En Core / Terra Core Prep (5035)	~~SVOCs (8270)~~ Phthalates 8270C	Pesticides (8081)	PCBs (8082)	~~PNAs (8310) or (8270)~~ Phenols 8270C	T22 Metals (6010/747X)	~~Cr(VI) (7196 or 7199 or 218.6)~~ PAHs 8270C	~~Air VOCs (TO-14A) or (TO-15)~~ TOTAL Ammonia	~~Air TPH (g) (TO-3)~~ Mercury 7471	TOC - 9060	Oil & Grease	Grain Size
1	Station 3	6/7/2011	1335	Sed	1	X															X					
2	Station 4		1500		1																X					
3	Station 5		1600		1																X					
4	Composite B-Top		1645		1								X	X		X			X	X	X	X	X	X	X	
5	Composite B-Bottom		1645		1								X	X		X			X	X	X	X	X	X	X	
6	Site Water		1700	WTR	5								X	X		X			X	X	X	X	X	X	X	
7	Elutriate Sed - Comp. B-Top		1645	Sed	2								X	X		X			X	X	X	X	X	X	X	
8	Comp B - Grain Size		1645		1																					X

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	6/8/2011	0945
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the [illegible] nd Yellow copies respectively.

06/01/10 Revision

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Table 8. Chemical Analyses for Sediment and Elutriates Samples

Analyte	Analysis Method	Sediment Target Detection Limits[a,b]	Elutriate Target Detection Limits[b]
Total Solids	SM 2540 B	0.1%	N/A
Total Organic Carbon	9060	0.1%	N/A
Total Ammonia	SM 4500-NH3 B/C (M)[c]	0.2 mg/kg	N/A
Total and Soluble Sulfides	376.2M[c]	0.1 mg/kg	N/A
Oil and Grease	EPA 413.2M	5.0 mg/kg	N/A
Arsenic (As)	6020/6010B[d]	0.1 mg/kg	0.001 mg/L
Cadmium (Cd)	6020/6010B[d]	0.1 mg/kg	0.001 mg/L
Chromium (Cr)	6020/6010B[d]	0.1 mg/kg	0.001 mg/L
Copper (Cu)	6020/6010B[d]	0.1 mg/kg	0.001 mg/L
Lead (Pb)	6020/6010B[d]	0.1 mg/kg	0.001 mg/L
Mercury (Hg)	7471A[d]	0.02 mg/kg	0.0002 mg/L
Nickel (Ni)	6020/6010B[d]	0.1 mg/kg	0.001 mg/L
Selenium (Se)	6020/6010B[d]	0.1 mg/kg	0.001 mg/L
Silver (Ag)	6020/6010B[d]	0.1 mg/kg	0.001 mg/L
Zinc (Zn)	6020/6010B[d]	2.0 mg/kg	0.001 mg/L
TRPH	418.1M[d]	5.0 mg/kg	N/A
PAHs[e]	8270C SIM[d]	20 µg/kg	1.0-15 µg/L
Chlorinated Pesticides[f]	8081A[d]	0.5 to 30 µg/kg	0.1 µg/L
PCB Congeners[g]	8270C SIM	1.0 µg/kg	1.0 µg/L
Phenols	8270C SIM[d]	20 to 100 µg/kg	N/A
Phthalates	8270C SIM[d]	10 µg/kg	N/A
Organotins	Rice/Krone[h]	1.0 µg/kg	1.0 µg/L

Notes:

a Sediment minimum detection limits are on a dry-weight basis.

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

c Standard Methods for the Examination of Water and Wastewater, 19th edition, American Public Health Association et al. 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, □-BHC, □-BHC, □-BHC (lindane), □-BHC, chlordane, 2,4- and 4,4-DDD, 2,4- and 4,4-DDE, 2,4- and 4,4-DDT, dieldrin, endosulfan I and II, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, and toxaphene.

g PCBs (sum of 41 congeners: 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194,201, and 206)

h Rice et al. 1987 or similar (e.g., Krone et al. 1989)

µg/kg micrograms per kilogram (parts per billion)
mg/kg milligrams per kilogram (parts per million),
µg/L micrograms per liter
mg/L milligrams per liter
N/A not analyzed
PAH polycyclic aromatic hydrocarbon
PCB polychlorinated biphenyl
SM Standard Methods
SOP standard operating procedure
TRPH total recoverable petroleum hydrocarbons

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-06-0516

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/08/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.2 °C + 0.5 °C (CF) = 3.7 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: [illegible]

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: [illegible]

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: RS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑ 6/8/11	☑	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☑16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☑ #7-8 Z

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☑ 5 CUBE 1 GAL ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** RS

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** WSC

Preservative: h: HCL n: HNO_3 na$_2$: $Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** WSC

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-06-0576

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **Sample(s)/Container(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s)/Container(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☑ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☑ **# of Container(s)**
  - ☐ **Analysis**
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☐ **Broken**
- ☐ **Sample container(s) not labeled**
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

(-4) RECEIVED 2 CONTAINER INSTEAD OF 1.

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: RS 06 /08 /11

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Composite Area B Physical Analysis

Petroleum Services Division
3437 Landco Dr.
Bakersfield, California 93308
Tel: 661-325-5657
Fax: 661-325-5808
www.corelab.com

Core Lab
RESERVOIR OPTIMIZATION

June 27, 2011

Danielle Gonsman
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92641-1432

Re: Physical Properties Analyses
Project: 11-06-0516
CL File No: 411044EN

Dear Ms Gonsman:

The final results of the particle-size distribution determinations performed upon the sample submitted from your Project # 11-06-0516 accompany this cover. This electronic version of the report will constitute the final report unless otherwise instructed.

Appropriate ASTM, EPA or API methodologies were used for this project and SOP's are available on request. Samples for this project are currently in storage and will be retained for thirty days past completion of testing at no charge. At the end of thirty days the samples will be disposed. You may contact me regarding continued storage, disposal or return of the samples.

We appreciate the opportunity to be of service to Calscience Environmental Laboratories, Inc. and trust these data will prove beneficial in the development of this project. Please do not hesitate to contact us (661-325-5657) if you have any questions regarding these results, or if we can be of any additional service.

Sincerely,
Core Laboratories

Jeffry L. Smith

Jeffry L. Smith
ARP Supervisor

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CLB Listed NYSE

SIEVE and LASER PARTICLE SIZE SUMMARY

(METHODOLOGY: ASTM D422/D4464M)

Core Lab
RESERVOIR OPTIMIZATION

Petroleum Services

Co. : Calscience Environmental Laboratories, Inc.
Proj. No. : 11-06-0516

Core Lab File No : 57111-411044EN
Date : 6/21/2011

Sample ID	Grain Size Description (Mean from Folk)	Median Grain Size, mm	Component Percentages								Silt & Clay
			Gravel	Sand Size						Clay	
				VCoarse	Coarse	Medium	Fine	VFine	Silt		
Comp B	silt	0.00	0.00	0.00	0.01	10.29	20.31	9.90	51.68	11.84	63.5

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Company : Calscience Environmental Laboratories, Inc.
Proj. No. : 11-06-0516

C.L. File No. : 57111-411044EN
Date : 6/21/2011

Sieve and Laser Particle Size Analysis (Metric)

. No. : 11-06-0	Component Percentages								Percentiles										Sorting Statistics (Folk)				
ID/	Gravel	Sand					Fines		Particle Diameter (mm)										Median	Mean	Sorting	Skew.	Kurt.
Depth(ft)		vcgr	cgr	mgr	fgr	vfgr	silt	clay	5	10	16	25	40	50	75	84	90	95	mm	mm	ϕ		
Comp B	0.00	0.00	0.01	10.29	20.31	9.90	51.68	11.84	0.0105 mgr	0.0083 fgr	0.0068 fgr	0.0052 fgr	0.0023 silt	0.0013 silt	0.0004 silt	0.0002 silt	0.0001 clay	0.0001 clay	0.001 silt	0.001 silt	2.330 v. Poor	0.095 near sym	0.763 platykurtic

** Particle-size distribution pattern precludes calculation of these statistical parameters

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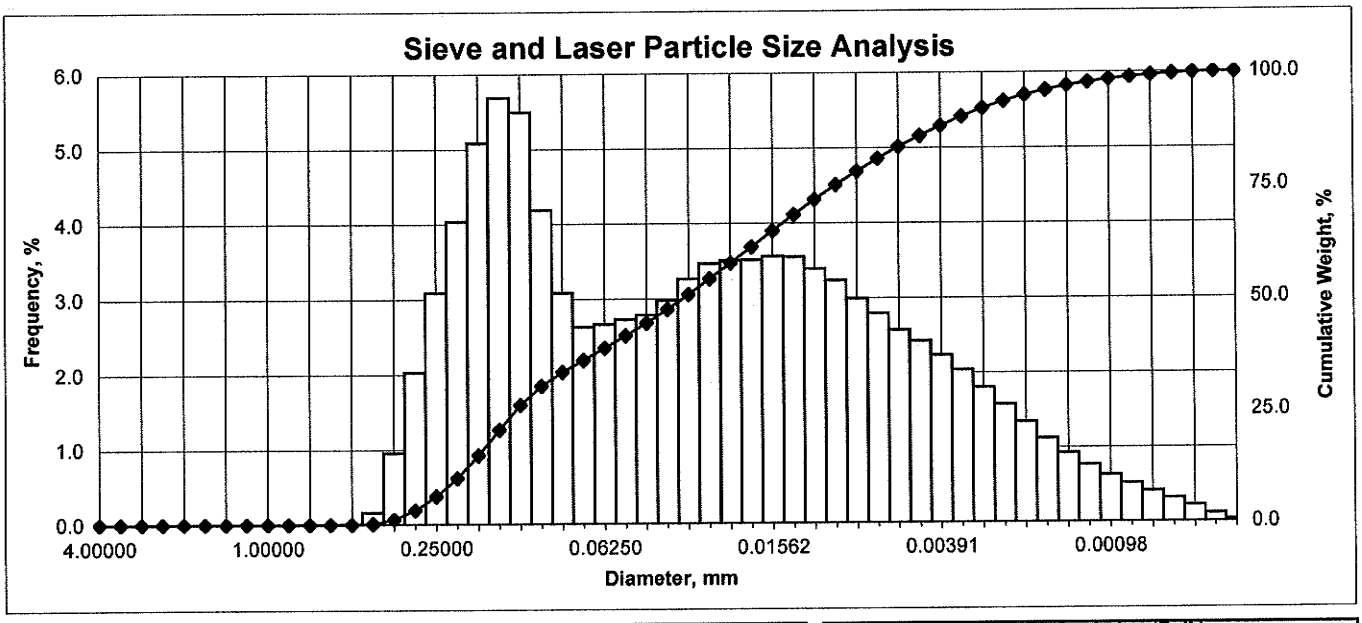
Core Lab

Company : Calscience Environmental Laboratories, Inc.
Proj. No. : 11-06-0516

CL File No. : 57111-411044EN
Sample ID : Comp B



Particle Size Distribution

	Diameter [US Mesh]	Diameter [in.]	Diameter [mm]	Diameter [ϕ]	Weight % [Incl.]	Weight % [Cum.]
Granule	5	0.157480	4.00000	-2.00	0.000	0.00
	6	0.132425	3.36359	-1.75	0.000	0.00
	7	0.111355	2.82843	-1.50	0.000	0.00
	8	0.093638	2.37841	-1.25	0.000	0.00
	10	0.078740	2.00000	-1.00	0.000	0.00
V Crse Sand	12	0.066212	1.68179	-0.75	0.000	0.00
	14	0.055678	1.41421	-0.50	0.000	0.00
	16	0.046819	1.18921	-0.25	0.000	0.00
	18	0.039370	1.00000	0.00	0.000	0.00
Coarse Sand	20	0.033106	0.84090	0.25	0.000	0.00
	25	0.027839	0.70711	0.50	0.000	0.00
	30	0.023410	0.59460	0.75	0.000	0.00
	35	0.019685	0.50000	1.00	0.013	0.01
Medium Sand	40	0.016553	0.42045	1.25	0.163	0.18
	45	0.013919	0.35355	1.50	0.963	1.14
	50	0.011705	0.29730	1.75	2.034	3.17
	60	0.009843	0.25000	2.00	3.090	6.26
Fine Sand	70	0.008277	0.21022	2.25	4.040	10.30
	80	0.006960	0.17678	2.50	5.083	15.39
	100	0.005852	0.14865	2.75	5.690	21.08
	120	0.004921	0.12500	3.00	5.494	26.57
V. Fine Sand	140	0.004138	0.10511	3.25	4.190	30.76
	170	0.003480	0.08839	3.50	3.083	33.84
	200	0.002926	0.07433	3.75	2.630	36.47
Silt	230	0.002461	0.06250	4.00	2.668	39.14
	270	0.002069	0.05256	4.25	2.730	41.87
	325	0.001740	0.04419	4.50	2.788	44.66
	400	0.001463	0.03716	4.75	2.976	47.63
	450	0.001230	0.03125	5.00	3.264	50.90
	500	0.001035	0.02628	5.25	3.468	54.37
	635	0.000870	0.02210	5.50	3.507	57.87
		0.000732	0.01858	5.75	3.513	61.39
		0.000615	0.01562	6.00	3.563	64.95
		0.000517	0.01314	6.25	3.552	68.50
		0.000435	0.01105	6.50	3.393	71.89
		0.000366	0.00929	6.75	3.236	75.13
		0.000308	0.00781	7.00	2.994	78.12
		0.000259	0.00657	7.25	2.796	80.92
		0.000217	0.00552	7.50	2.573	83.49
		0.000183	0.00465	7.75	2.426	85.92
		0.000154	0.00391	8.00	2.236	88.16
Clay		0.000129	0.00328	8.25	2.040	90.20
		0.000109	0.00276	8.50	1.807	92.00
		0.000091	0.00232	8.75	1.579	93.58
		0.000077	0.00195	9.00	1.345	94.93
		0.000065	0.00164	9.25	1.124	96.05
		0.000054	0.00138	9.50	0.927	96.98
		0.000046	0.00116	9.75	0.767	97.75
		0.000038	0.00098	10.00	0.629	98.37
		0.000032	0.00082	10.25	0.519	98.89
		0.000027	0.00069	10.50	0.417	99.31
		0.000023	0.00058	10.75	0.320	99.63
		0.000019	0.00049	11.00	0.222	99.85
		0.000016	0.00041	11.25	0.112	99.97
		0.000015	0.00038	11.50	0.035	100.00

Sorting Statistics (Folk)

Parameter	Trask	Inman	Folk
Median	Silt sized		
(in)	0.0013	0.0013	0.0013
(mm)	0.0326	0.0326	0.0326
Mean	Silt sized		
(in)	0.0028	0.0012	0.0012
(mm)	0.0706	0.0304	0.0311
Sorting	V. Poor		
	3.754	0.176	2.330
Skewness	Near symmetrical		
	1.076	0.210	0.095
Kurtosis	Platykurtic		
	0.294	0.416	0.763

Component Percentages

Gravel	Sand	Silt	Clay	Silt + Clay
0.00	36.47	51.68	11.84	63.53

Percentile [Weight, %]	Particle Diameter [in.]	Particle Diameter [mm]	Particle Diameter [phi]
5	0.0105	0.2660	1.9106
10	0.0083	0.2114	2.2417
16	0.0068	0.1728	2.5328
25	0.0052	0.1318	2.9237
40	0.0023	0.0590	4.0822
50	0.0013	0.0326	4.9371
75	0.0004	0.0094	6.7405
84	0.0002	0.0053	7.5492
90	0.0001	0.0033	8.2253
95	0.0001	0.0019	9.0147

** Distribution pattern precludes calculation of these statistical parameters.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: CORE LABORATORIES

CHAIN OF CUSTODY RECORD 411044

DATE: 06/09/11
PAGE: 1 OF 1

LABORATORY CLIENT: Calscience Environmental Laboratories, Inc.
ADDRESS: 7440 Lincoln Way
CITY: Garden Grove, CA 92841-1427
TEL: (714) 895-5494
E-MAIL: dgonsman@calscience.com

CLIENT PROJECT NAME / NUMBER: 11-06-0516
P.O. NO.: 11-06-0516
PROJECT CONTACT: Danielle Gonsman
TEMP BLANK:
LAB USE ONLY
SAMPLER(S): (PRINT)

TURNAROUND TIME
___SAME DAY ___24 HR ___48HR ___72 HR ___5 DAYS X STANDARD

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Contact prior to subcontracting samples

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	GRAIN SIZE ASTM D422/4464
	Comp B- Grain Size	06/07/11	1645	sed	1	X

Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:
(CALSCIENCE)	GSO # 516752843	6/9/11	1620
Relinquished by: (Signature)	Received by / Affiliation: (Signature) Jeff Smith Core Lab	6/10/11	900
Relinquished by: (Signature)	Received by / Affiliation: (Signature)	Date:	Time:

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Elutriate Chemistry

Calscience
Environmental & Marine Chemistry Laboratories

CALSCIENCE

WORK ORDER NUMBER: 11-06-0773

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Earth & Environmental

Client Project Name: 1015101913

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

Approved for release on 06/29/2011 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, 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. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience
Environmental & Marine Chemistry Laboratories

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Work Order Number: 11-06-0773

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Calscience Environmental Laboratories, Inc.

CASE NARRATIVE

Calscience Work Order No.: 11-06-0773
Project ID: 1015101913 / POLA Berths 167-169

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

Sample Condition on Receipt

One seawater sample and one sediment sample was received for this project on June 10, 2011 (under CEL Work Order 11-06-0516). The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures, and the temperature of the samples were 3.7°C. Upon receipt at the lab, the samples were given laboratory identification numbers, logged into the Laboratory Information Management System (LIMS) and stored in refrigeration units pending elutriate preparation.

Elutriate Preparation

The elutriate sample was prepared in accordance with the Standard Elutriate Testing protocol (Inland Testing Manual, 2006), as follows.

Prior to use, all labware was thoroughly cleaned in accordance with standard laboratory operating procedures (detergent wash, acid bath, and rinse with D.I. water). Approximately eight liters of the site water was placed a commercial grade stainless steel mixing bowl. Using volumetric displacement, approximately two liters of sediment was added to the bowl with the site water. At room temperature, the mixture was stirred vigorously for 30 minutes. After mixing, the elutriate sample was allowed to settle for approximately one hour. The supernatant was then siphoned off and collected in clean glass containers. Approximately 6.0 to 7.0 liters of clear supernatant were decanted from the settled mixture.

The elutriate sample was centrifuged and transferred to new 1L amber glass containers (for all hydrocarbon determinations) and a 250mL HDPE container (for metals determination). The samples were then logged into LIMS given laboratory identification numbers, and stored in refrigeration units pending chemistry analysis.

In order to account for any possible laboratory contamination during the elutriate preparation, the Site Water sample was treated as a control and processed in the same manner as the elutriate sample. The metals results for the Site Water sample showed elevated Chromium, Copper and Nickel detections relative to the elutriate sample. Realizing the data made no sense, the chemist was questioned about the preparation. An observation was noted that during the mixing of the Site Water sample, one of the blades of the commercial mixer was scraping the mixing bowl. The scraping was not observed during the elutriate preparation. In order to determine if the metal-on-metal scraping may be the cause of the high Site Water metals concentrations, it was then decided to analyze the original Site Water for metals. The elevated Chromium, Copper and Nickel levels were not found in the original Site Water, rather the levels were

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sensible relative to the elutriate sample. We therefore believe that the unusually high metal concentrations of the Site Water control sample did result from the scraping observed during the mixing process, and that the data does not represent a true control blank. Therefore, both sets of data are presented within this report.

Tests Performed

Trace Metals by EPA 1640
Mercury by EPA 7470A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs by EPA 8270C SIM
Organotins by Krone et al.

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 tests.

Laboratory Control Samples

Laboratory Control Sample (LCS/LCSD) analyses were performed for each applicable method at the required frequencies, and all parameters were within the control limits for each method.

Matrix Spikes

Due to sample volume limitations, matrix spikes could not be performed for all analyses. Matrix spiking was performed for EPA 1640 Trace Metals, EPA 7470A Mercury and EPA 8270C SIM PAHs. All parameters were within the established control limits with the following exceptions.

Arsenic Nickel and Selenium, by EPA 1640, fell outside the established control limits due to matrix interference. However, the results are released with no further action since the corresponding LCS and LCSD recoveries were within the established control limits.

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Several of the EPA 8270C SIM PAH MS and/or MSD recoveries were above the established control limits. The results have been flagged with the appropriate qualifiers and released with no further clarification since the corresponding LCS/LCSD recoveries were in control.

Surrogates

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

Acronyms

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PAHs
		Units:	ug/L
Project: 1015101913			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate Sed-Comp B	**11-06-0773-1-E**	**06/10/11 12:00**	**Aqueous**	**GC/MS BBB**	**06/14/11**	**06/16/11 14:28**	**110614L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	0.29	0.20	1		Pyrene	1.2	0.20	1	
2-Methylnaphthalene	ND	0.20	1		Benzo (a) Anthracene	ND	0.20	1	
1-Methylnaphthalene	ND	0.20	1		Chrysene	ND	0.20	1	
Acenaphthylene	ND	0.20	1		Benzo (k) Fluoranthene	ND	0.20	1	
Acenaphthene	0.36	0.20	1		Benzo (b) Fluoranthene	ND	0.20	1	
Fluorene	ND	0.20	1		Benzo (a) Pyrene	ND	0.20	1	
Phenanthrene	0.24	0.20	1		Indeno (1,2,3-c,d) Pyrene	ND	0.20	1	
Anthracene	ND	0.20	1		Dibenz (a,h) Anthracene	ND	0.20	1	
Fluoranthene	0.48	0.20	1		Benzo (g,h,i) Perylene	ND	0.20	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Nitrobenzene-d5	86	28-139			2-Fluorobiphenyl	84	33-144		
p-Terphenyl-d14	78	23-160							

Site Water	**11-06-0773-2-C**	**06/10/11 12:00**	**Aqueous**	**GC/MS BBB**	**06/14/11**	**06/16/11 15:42**	**110614L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.20	1		Pyrene	ND	0.20	1	
2-Methylnaphthalene	ND	0.20	1		Benzo (a) Anthracene	ND	0.20	1	
1-Methylnaphthalene	ND	0.20	1		Chrysene	ND	0.20	1	
Acenaphthylene	ND	0.20	1		Benzo (k) Fluoranthene	ND	0.20	1	
Acenaphthene	ND	0.20	1		Benzo (b) Fluoranthene	ND	0.20	1	
Fluorene	ND	0.20	1		Benzo (a) Pyrene	ND	0.20	1	
Phenanthrene	ND	0.20	1		Indeno (1,2,3-c,d) Pyrene	ND	0.20	1	
Anthracene	ND	0.20	1		Dibenz (a,h) Anthracene	ND	0.20	1	
Fluoranthene	ND	0.20	1		Benzo (g,h,i) Perylene	ND	0.20	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Nitrobenzene-d5	86	28-139			2-Fluorobiphenyl	81	33-144		
p-Terphenyl-d14	76	23-160							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PAHs
		Units:	ug/L
Project: 1015101913			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-06-008-369**	**N/A**	**Aqueous**	**GC/MS BBB**	**06/14/11**	**06/16/11 11:34**	**110614L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.20	1		Pyrene	ND	0.20	1	
2-Methylnaphthalene	ND	0.20	1		Benzo (a) Anthracene	ND	0.20	1	
1-Methylnaphthalene	ND	0.20	1		Chrysene	ND	0.20	1	
Acenaphthylene	ND	0.20	1		Benzo (k) Fluoranthene	ND	0.20	1	
Acenaphthene	ND	0.20	1		Benzo (b) Fluoranthene	ND	0.20	1	
Fluorene	ND	0.20	1		Benzo (a) Pyrene	ND	0.20	1	
Phenanthrene	ND	0.20	1		Indeno (1,2,3-c,d) Pyrene	ND	0.20	1	
Anthracene	ND	0.20	1		Dibenz (a,h) Anthracene	ND	0.20	1	
Fluoranthene	ND	0.20	1		Benzo (g,h,i) Perylene	ND	0.20	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	84	28-139		2-Fluorobiphenyl	79	33-144	
p-Terphenyl-d14	79	23-160					

Return to Contents

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	Organotins by Krone et al.
		Units:	ng/L
Project: 1015101913			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate Sed-Comp B	**11-06-0773-1-C**	**06/10/11 12:00**	**Aqueous**	**GC/MS Y**	**06/13/11**	**06/14/11 19:06**	**110613L16**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	ND	3.0	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	88	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Site Water	**11-06-0773-2-D**	**06/10/11 12:00**	**Aqueous**	**GC/MS Y**	**06/13/11**	**06/14/11 19:38**	**110613L16**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	ND	3.0	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	87	50-130	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-07-035-147**	**N/A**	**Aqueous**	**GC/MS Y**	**06/13/11**	**06/14/11 18:03**	**110613L16**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	ND	3.0	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	75	50-130	

Return to Contents

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: 1015101913			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate Sed-Comp B	**11-06-0773-1-D**	**06/10/11 12:00**	**Aqueous**	**GC 51**	**06/13/11**	**06/14/11 12:17**	**110613L10**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Alpha-BHC	ND	0.050	1		4,4'-DDD	ND	0.050	1	
Gamma-BHC	ND	0.050	1		Endosulfan II	ND	0.050	1	
Beta-BHC	ND	0.050	1		4,4'-DDT	ND	0.050	1	
Heptachlor	ND	0.050	1		Endosulfan Sulfate	ND	0.050	1	
Delta-BHC	ND	0.050	1		Chlordane	ND	0.50	1	
Aldrin	ND	0.050	1		Toxaphene	ND	2.0	1	
Heptachlor Epoxide	ND	0.050	1		Endrin Ketone	ND	0.050	1	
Endosulfan I	ND	0.050	1		Alpha Chlordane	ND	0.050	1	
Dieldrin	ND	0.050	1		Gamma Chlordane	ND	0.050	1	
4,4'-DDE	ND	0.050	1		2,4'-DDD	ND	0.050	1	
Endrin	ND	0.050	1		2,4'-DDE	ND	0.050	1	
Endrin Aldehyde	ND	0.050	1		2,4'-DDT	ND	0.050	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	63	50-135		2,4,5,6-Tetrachloro-m-Xylene	77	50-135	

Site Water	**11-06-0773-2-B**	**06/10/11 12:00**	**Aqueous**	**GC 51**	**06/13/11**	**06/14/11 12:31**	**110613L10**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Alpha-BHC	ND	0.050	1		4,4'-DDD	ND	0.050	1	
Gamma-BHC	ND	0.050	1		Endosulfan II	ND	0.050	1	
Beta-BHC	ND	0.050	1		4,4'-DDT	ND	0.050	1	
Heptachlor	ND	0.050	1		Endosulfan Sulfate	ND	0.050	1	
Delta-BHC	ND	0.050	1		Chlordane	ND	0.50	1	
Aldrin	ND	0.050	1		Toxaphene	ND	2.0	1	
Heptachlor Epoxide	ND	0.050	1		Endrin Ketone	ND	0.050	1	
Endosulfan I	ND	0.050	1		Alpha Chlordane	ND	0.050	1	
Dieldrin	ND	0.050	1		Gamma Chlordane	ND	0.050	1	
4,4'-DDE	ND	0.050	1		2,4'-DDD	ND	0.050	1	
Endrin	ND	0.050	1		2,4'-DDE	ND	0.050	1	
Endrin Aldehyde	ND	0.050	1		2,4'-DDT	ND	0.050	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	79	50-135		2,4,5,6-Tetrachloro-m-Xylene	81	50-135	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L
Project: 1015101913			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-830-49**	**N/A**	**Aqueous**	**GC 51**	**06/13/11**	**06/14/11 11:19**	**110613L10**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Alpha-BHC	ND	0.050	1		4,4'-DDD	ND	0.050	1	
Gamma-BHC	ND	0.050	1		Endosulfan II	ND	0.050	1	
Beta-BHC	ND	0.050	1		4,4'-DDT	ND	0.050	1	
Heptachlor	ND	0.050	1		Endosulfan Sulfate	ND	0.050	1	
Delta-BHC	ND	0.050	1		Chlordane	ND	0.50	1	
Aldrin	ND	0.050	1		Toxaphene	ND	2.0	1	
Heptachlor Epoxide	ND	0.050	1		Endrin Ketone	ND	0.050	1	
Endosulfan I	ND	0.050	1		Alpha Chlordane	ND	0.050	1	
Dieldrin	ND	0.050	1		Gamma Chlordane	ND	0.050	1	
4,4'-DDE	ND	0.050	1		2,4'-DDD	ND	0.050	1	
Endrin	ND	0.050	1		2,4'-DDE	ND	0.050	1	
Endrin Aldehyde	ND	0.050	1		2,4'-DDT	ND	0.050	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	80	50-135		2,4,5,6-Tetrachloro-m-Xylene	82	50-135	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/L
Project: 1015101913			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate Sed-Comp B	**11-06-0773-1-B**	**06/10/11 12:00**	**Aqueous**	**GC/MS HHH**	**06/14/11**	**06/16/11 13:37**	**110614L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	0.20	1		PCB184	ND	0.20	1	
PCB018	ND	0.20	1		PCB153	ND	0.20	1	
PCB028	ND	0.20	1		PCB168	ND	0.20	1	
PCB052	ND	0.20	1		PCB105	ND	0.20	1	
PCB049	ND	0.20	1		PCB138/158	ND	0.40	1	
PCB044	ND	0.20	1		PCB187	ND	0.20	1	
PCB037	ND	0.20	1		PCB183	ND	0.20	1	
PCB074	ND	0.20	1		PCB126	ND	0.20	1	
PCB070	ND	0.20	1		PCB128	ND	0.20	1	
PCB066	ND	0.20	1		PCB167	ND	0.20	1	
PCB101	ND	0.20	1		PCB177	ND	0.20	1	
PCB099	ND	0.20	1		PCB156	ND	0.20	1	
PCB119	ND	0.20	1		PCB157	ND	0.20	1	
PCB087	ND	0.20	1		PCB180	ND	0.20	1	
PCB081	ND	0.20	1		PCB170	ND	0.20	1	
PCB110	ND	0.20	1		PCB201	ND	0.20	1	
PCB151	ND	0.20	1		PCB169	ND	0.20	1	
PCB077	ND	0.20	1		PCB189	ND	0.20	1	
PCB149	ND	0.20	1		PCB195	ND	0.20	1	
PCB123	ND	0.20	1		PCB194	ND	0.20	1	
PCB118	ND	0.20	1		PCB206	ND	0.20	1	
PCB114	ND	0.20	1		PCB209	ND	0.20	1	

Surrogates:	REC (%)	Control Limits	Qual
p-Terphenyl-d14	134	30-160	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/L
Project: 1015101913			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Site Water	**11-06-0773-2-E**	**06/10/11 12:00**	**Aqueous**	**GC/MS HHH**	**06/14/11**	**06/16/11 14:04**	**110614L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	0.20	1		PCB184	ND	0.20	1	
PCB018	ND	0.20	1		PCB153	ND	0.20	1	
PCB028	ND	0.20	1		PCB168	ND	0.20	1	
PCB052	ND	0.20	1		PCB105	ND	0.20	1	
PCB049	ND	0.20	1		PCB138/158	ND	0.40	1	
PCB044	ND	0.20	1		PCB187	ND	0.20	1	
PCB037	ND	0.20	1		PCB183	ND	0.20	1	
PCB074	ND	0.20	1		PCB126	ND	0.20	1	
PCB070	ND	0.20	1		PCB128	ND	0.20	1	
PCB066	ND	0.20	1		PCB167	ND	0.20	1	
PCB101	ND	0.20	1		PCB177	ND	0.20	1	
PCB099	ND	0.20	1		PCB156	ND	0.20	1	
PCB119	ND	0.20	1		PCB157	ND	0.20	1	
PCB087	ND	0.20	1		PCB180	ND	0.20	1	
PCB081	ND	0.20	1		PCB170	ND	0.20	1	
PCB110	ND	0.20	1		PCB201	ND	0.20	1	
PCB151	ND	0.20	1		PCB169	ND	0.20	1	
PCB077	ND	0.20	1		PCB189	ND	0.20	1	
PCB149	ND	0.20	1		PCB195	ND	0.20	1	
PCB123	ND	0.20	1		PCB194	ND	0.20	1	
PCB118	ND	0.20	1		PCB206	ND	0.20	1	
PCB114	ND	0.20	1		PCB209	ND	0.20	1	

Surrogates:	REC (%)	Control Limits	Qual
p-Terphenyl-d14	119	30-160	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/L
Project: 1015101913			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-935-7**	**N/A**	**Aqueous**	**GC/MS HHH**	**06/14/11**	**06/16/11 13:08**	**110614L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	0.20	1		PCB184	ND	0.20	1	
PCB018	ND	0.20	1		PCB153	ND	0.20	1	
PCB028	ND	0.20	1		PCB168	ND	0.20	1	
PCB052	ND	0.20	1		PCB105	ND	0.20	1	
PCB049	ND	0.20	1		PCB138/158	ND	0.40	1	
PCB044	ND	0.20	1		PCB187	ND	0.20	1	
PCB037	ND	0.20	1		PCB183	ND	0.20	1	
PCB074	ND	0.20	1		PCB126	ND	0.20	1	
PCB070	ND	0.20	1		PCB128	ND	0.20	1	
PCB066	ND	0.20	1		PCB167	ND	0.20	1	
PCB101	ND	0.20	1		PCB177	ND	0.20	1	
PCB099	ND	0.20	1		PCB156	ND	0.20	1	
PCB119	ND	0.20	1		PCB157	ND	0.20	1	
PCB087	ND	0.20	1		PCB180	ND	0.20	1	
PCB081	ND	0.20	1		PCB170	ND	0.20	1	
PCB110	ND	0.20	1		PCB201	ND	0.20	1	
PCB151	ND	0.20	1		PCB169	ND	0.20	1	
PCB077	ND	0.20	1		PCB189	ND	0.20	1	
PCB149	ND	0.20	1		PCB195	ND	0.20	1	
PCB123	ND	0.20	1		PCB194	ND	0.20	1	
PCB118	ND	0.20	1		PCB206	ND	0.20	1	
PCB114	ND	0.20	1		PCB209	ND	0.20	1	

Surrogates:	REC (%)	Control Limits	Qual
p-Terphenyl-d14	94	30-160	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate Sed-Comp B	**11-06-0773-1-A**	**06/10/11 12:00**	**Aqueous**	**Mercury**	**06/13/11**	**06/13/11 17:53**	**110613L03**

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

Site Water	**11-06-0773-2-A**	**06/10/11 12:00**	**Aqueous**	**Mercury**	**06/13/11**	**06/13/11 17:55**	**110613L03**

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

Method Blank	**099-12-457-229**	**N/A**	**Aqueous**	**Mercury**	**06/13/11**	**06/13/11 17:46**	**110613L03**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received:	06/10/11
Work Order No:	11-06-0773
Preparation:	EPA 3005A Total
Method:	EPA 1640
Units:	ug/L

Project: 1015101913

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate Sed-Comp B	**11-06-0773-1-A**	**06/10/11 12:00**	**Aqueous**	**ICP/MS 03**	**06/13/11**	**06/14/11 16:21**	**110613L05**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	6.67	0.0300	1		Nickel	1.15	0.0500	1	
Cadmium	0.0346	0.0300	1		Selenium	0.288	0.0500	1	
Chromium	0.406	0.200	1		Silver	0.318	0.0500	1	
Copper	0.866	0.0300	1		Zinc	9.03	1.00	1	
Lead	0.219	0.0300	1						

Site Water	**11-06-0773-2-A**	**06/10/11 12:00**	**Aqueous**	**ICP/MS 03**	**06/13/11**	**06/14/11 16:33**	**110613L05**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	1.21	0.0300	1		Nickel	8.29	0.0500	1	
Cadmium	0.156	0.0300	1		Selenium	ND	0.0500	1	
Chromium	0.427	0.200	1		Silver	0.325	0.0500	1	
Copper	6.29	0.0300	1		Zinc	8.75	1.00	1	
Lead	0.168	0.0300	1						

Site Water (Original)	**11-06-0773-3-A**	**06/07/11 17:00**	**Aqueous**	**ICP/MS 03**	**06/27/11**	**06/27/11 18:12**	**110627L06**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	1.29	0.0300	1		Nickel	0.628	0.0500	1	
Cadmium	0.0732	0.0300	1		Selenium	ND	0.0500	1	
Chromium	0.301	0.200	1		Silver	0.377	0.0500	1	
Copper	1.58	0.0300	1		Zinc	6.35	1.00	1	
Lead	0.277	0.0300	1						

Method Blank	**099-13-067-53**	**N/A**	**Aqueous**	**ICP/MS 03**	**06/13/11**	**06/13/11 18:40**	**110613L05**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.0300	1		Nickel	ND	0.0500	1	
Cadmium	ND	0.0300	1		Selenium	ND	0.0500	1	
Chromium	ND	0.200	1		Silver	ND	0.0500	1	
Copper	ND	0.0300	1		Zinc	ND	1.00	1	
Lead	ND	0.0300	1						

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3005A Total
		Method:	EPA 1640
		Units:	ug/L
Project: 1015101913			Page 2 of 2

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-13-067-57**	**N/A**	**Aqueous**	**ICP/MS 03**	**06/27/11**	**06/27/11 16:40**	**110627L06**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.0300	1		Nickel	ND	0.0500	1	
Cadmium	ND	0.0300	1		Selenium	ND	0.0500	1	
Chromium	ND	0.200	1		Silver	ND	0.0500	1	
Copper	ND	0.0300	1		Zinc	ND	1.00	1	
Lead	ND	0.0300	1						

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/10/11
Work Order No:	11-06-0773
Preparation:	EPA 3005A Total
Method:	EPA 1640

Project 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Elutriate Sed-Comp B	**Aqueous**	**ICP/MS 03**	**06/13/11**	**06/14/11**	**110613S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	4X	4X	50-150	4X	0-20	Q
Cadmium	112	108	50-150	3	0-20	
Chromium	72	73	50-150	1	0-20	
Copper	119	111	50-150	3	0-20	
Lead	113	110	50-150	2	0-20	
Nickel	140	136	50-150	1	0-20	
Selenium	151	151	50-150	0	0-20	3
Silver	118	108	50-150	4	0-20	
Zinc	103	95	50-150	3	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/10/11
Work Order No:	11-06-0773
Preparation:	EPA 3005A Filt.
Method:	EPA 1640

Project 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-06-1493-5	**Sea Water**	**ICP/MS 03**	**06/27/11**	**06/27/11**	**110627S06**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	4X	4X	50-150	4X	0-20	Q
Cadmium	97	96	50-150	1	0-20	
Chromium	96	94	50-150	3	0-20	
Copper	138	111	50-150	15	0-20	
Lead	107	107	50-150	0	0-20	
Nickel	4X	4X	50-150	4X	0-20	Q
Selenium	78	49	50-150	35	0-20	3,4
Silver	119	107	50-150	6	0-20	
Zinc	106	99	50-150	5	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/10/11
Work Order No:	11-06-0773
Preparation:	EPA 7470A Total
Method:	EPA 7470A

Project 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Elutriate Sed-Comp B	**Aqueous**	**Mercury**	**06/13/11**	**06/13/11**	**110613S03**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	94	98	71-134	5	0-14	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	06/10/11
Work Order No:	11-06-0773
Preparation:	EPA 3510C
Method:	EPA 8270C SIM PAHs

Project 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Elutriate Sed-Comp B	**Aqueous**	**GC/MS BBB**	**06/14/11**	**06/16/11**	**110614S08**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Naphthalene	156	155	21-133	1	0-25	3
2-Methylnaphthalene	115	114	21-140	1	0-25	
1-Methylnaphthalene	122	122	20-140	0	0-25	
Acenaphthylene	90	90	33-145	0	0-25	
Acenaphthene	126	125	49-121	1	0-25	3
Fluorene	127	126	59-121	1	0-25	3
Phenanthrene	154	152	54-120	1	0-25	3
Anthracene	83	83	27-133	1	0-25	
Fluoranthene	93	94	26-137	1	0-25	
Pyrene	96	95	18-168	1	0-25	
Benzo (a) Anthracene	89	88	33-143	1	0-25	
Chrysene	91	91	17-168	0	0-25	
Benzo (k) Fluoranthene	97	93	24-159	3	0-25	
Benzo (b) Fluoranthene	92	94	24-159	2	0-25	
Benzo (a) Pyrene	89	89	17-163	0	0-25	
Indeno (1,2,3-c,d) Pyrene	84	84	10-171	0	0-25	
Dibenz (a,h) Anthracene	82	82	10-219	0	0-25	
Benzo (g,h,i) Perylene	82	83	10-227	1	0-25	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3005A Total
		Method:	EPA 1640

Project: 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-067-53	**Aqueous**	**ICP/MS 03**	**06/13/11**	**06/14/11**	**110613L05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	116	119	70-130	3	0-20	
Cadmium	100	100	70-130	0	0-20	
Chromium	107	108	70-130	1	0-20	
Copper	108	108	70-130	0	0-20	
Lead	104	106	70-130	2	0-20	
Nickel	98	100	70-130	1	0-20	
Selenium	74	75	70-130	1	0-20	
Silver	79	76	70-130	4	0-20	
Zinc	108	108	70-130	0	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3005A Total
		Method:	EPA 1640

Project: 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-067-57	**Aqueous**	**ICP/MS 03**	**06/27/11**	**06/27/11**	**110627L06**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	96	93	70-130	3	0-20	
Cadmium	89	88	70-130	1	0-20	
Chromium	100	100	70-130	1	0-20	
Copper	98	95	70-130	3	0-20	
Lead	98	97	70-130	2	0-20	
Nickel	93	91	70-130	2	0-20	
Selenium	82	82	70-130	0	0-20	
Silver	90	92	70-130	2	0-20	
Zinc	105	98	70-130	7	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-229	**Aqueous**	**Mercury**	**06/13/11**	**06/13/11**	**110613L03**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	91	91	90-122	0	0-14	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PAHs

Project: 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-06-008-369	**Aqueous**	**GC/MS BBB**	**06/14/11**	**06/16/11**	**110614L08**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Naphthalene	89	89	21-133	2-152	0	0-25	
2-Methylnaphthalene	83	83	21-140	1-160	0	0-25	
1-Methylnaphthalene	94	94	20-140	0-160	0	0-25	
Acenaphthylene	86	84	33-145	14-164	2	0-25	
Acenaphthene	89	88	55-121	44-132	1	0-25	
Fluorene	88	87	59-121	49-131	1	0-25	
Phenanthrene	89	89	54-120	43-131	0	0-25	
Anthracene	70	71	27-133	9-151	1	0-25	
Fluoranthene	90	90	26-137	8-156	0	0-25	
Pyrene	89	89	45-129	31-143	0	0-25	
Benzo (a) Anthracene	86	86	33-143	15-161	0	0-25	
Chrysene	90	92	17-168	0-193	2	0-25	
Benzo (k) Fluoranthene	97	96	24-159	2-182	1	0-25	
Benzo (b) Fluoranthene	91	90	24-159	2-182	2	0-25	
Benzo (a) Pyrene	86	85	17-163	0-187	2	0-25	
Indeno (1,2,3-c,d) Pyrene	88	86	25-175	0-200	2	0-25	
Dibenz (a,h) Anthracene	86	85	25-175	0-200	2	0-25	
Benzo (g,h,i) Perylene	86	84	25-157	3-179	2	0-25	

Total number of LCS compounds : 18
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	Organotins by Krone et al.

Project: 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-035-147	**Aqueous**	**GC/MS Y**	**06/13/11**	**06/14/11**	**110613L16**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	57	51	50-130	12	0-20	
Tributyltin	88	76	50-130	15	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-0773
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8081A

Project: 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-830-49	**Aqueous**	**GC 51**	**06/13/11**	**06/14/11**	**110613L10**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Alpha-BHC	88	88	50-135	36-149	1	0-25	
Gamma-BHC	91	92	50-135	36-149	1	0-25	
Beta-BHC	91	100	50-135	36-149	9	0-25	
Heptachlor	87	87	50-135	36-149	0	0-25	
Delta-BHC	86	87	50-135	36-149	1	0-25	
Aldrin	81	81	50-135	36-149	0	0-25	
Heptachlor Epoxide	86	86	50-135	36-149	1	0-25	
Endosulfan I	86	87	50-135	36-149	1	0-25	
Dieldrin	86	86	50-135	36-149	1	0-25	
4,4'-DDE	85	85	50-135	36-149	0	0-25	
Endrin	98	97	50-135	36-149	1	0-25	
Endrin Aldehyde	83	82	50-135	36-149	2	0-25	
4,4'-DDD	86	84	50-135	36-149	2	0-25	
Endosulfan II	89	86	50-135	36-149	3	0-25	
4,4'-DDT	79	79	50-135	36-149	1	0-25	
Endosulfan Sulfate	85	86	50-135	36-149	1	0-25	
Methoxychlor	92	94	50-135	36-149	2	0-25	
Endrin Ketone	88	89	50-135	36-149	1	0-25	
Alpha Chlordane	85	85	50-135	36-149	0	0-25	
Gamma Chlordane	86	86	50-135	36-149	0	0-25	

Total number of LCS compounds : 20
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 11-06-0773
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-935-7	**Aqueous**	**GC/MS HHH**	**06/14/11**	**06/16/11**	**110614L07**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
PCB008	47	47	30-160	8-182	0	0-50	
PCB018	48	48	30-160	8-182	1	0-50	
PCB028	49	49	30-160	8-182	0	0-50	
PCB052	48	48	30-160	8-182	0	0-50	
PCB044	50	50	30-160	8-182	1	0-50	
PCB066	50	50	30-160	8-182	1	0-50	
PCB101	50	50	30-160	8-182	0	0-50	
PCB077	50	50	30-160	8-182	0	0-50	
PCB118	52	51	30-160	8-182	1	0-50	
PCB153	48	48	30-160	8-182	0	0-50	
PCB105	49	49	30-160	8-182	0	0-50	
PCB187	48	48	30-160	8-182	0	0-50	
PCB126	45	46	30-160	8-182	1	0-50	
PCB128	47	47	30-160	8-182	1	0-50	
PCB180	48	48	30-160	8-182	0	0-50	
PCB170	46	46	30-160	8-182	1	0-50	
PCB195	46	46	30-160	8-182	0	0-50	
PCB206	41	41	30-160	8-182	0	0-50	
PCB209	34	33	30-160	8-182	1	0-50	

Total number of LCS compounds : 19
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-06-0773

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
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 (MS) or Matrix Spike Duplicate (MSD) 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 or PES/PESD 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 without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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Calscience Environmental Laboratories, Inc.

☐ SoCal Laboratory
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494

☐ NorCal Service Center
5063 Commercial Circle, Suite H
Concord, CA 94520-8577
(925) 689-9022

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: 06-0773

Date: 6-10-2011

Page 1 of 1

LABORATORY CLIENT: AMEC

ADDRESS: 5210 Sky Park Court Suite 200

CITY: San Diego, CA STATE: ZIP: 92123

TEL: 858-300-4320 E-MAIL: Barry.Snyder@amec.com

CLIENT PROJECT NAME / NUMBER: 1015101913

P.O. NO.:

PROJECT CONTACT: Barry Snyder

SAMPLER(S): (PRINT)

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS:
*Elutriate from SET - metals filtered, organics centrifuged, ~~metals preserved, organics not~~

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	~~Preserved~~	Field Filtered	Metals EPA 1640	As, Cd, Cr, Cu, Pb, Ni, Se, Ag, Zn	Mercury EPA 7470A	PAHs 8270 SIM	Chlorinated Pest EPA 8081A	PCB Congeners EPA 8270 SIM	Organotins (Krone)	~~As (MSD)~~
1	Elutriate Sed - Comp B	6-10-11	12:00	W	9	X	X		X		X	X	X	X	X	
2	Site Water	6-10-11	12:00	W	5	X	X		X		X	X	X	X	X	
								(MS/MSD)			(MS/MSD)					

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Danielle Cal	[signature]	6/10/11	1636
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

06/01/10 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-06-0773

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/10/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 4.1 °C + 0.5 °C (CF) = 4.6 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Initial: [illegible]

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: [illegible]

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: DL

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☐	☑	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☑1AGB**na$_2$** ☐1AGB**s** *7

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

*☑250PB 2 ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** DL

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** MSL

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** MSL

*(-2) 4 x 1AGB + 1 x 250PB

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Calscience
Environmental & Marine Chemistry Laboratories

CALSCIENCE

WORK ORDER NUMBER: 11-06-1971

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Earth & Environmental

Client Project Name: POLA Berths 167-169 / 1015101913.0001

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

Approved for release on 07/8/2011 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, 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. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience
Environmental & Marine Chemistry Laboratories

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Work Order Number: 11-06-1971

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Calscience Environmental Laboratories, Inc.

CASE NARRATIVE

Calscience Work Order No.: 11-06-1971
Project ID: 1015101913 / POLA Berths 167-169

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

Sample Condition on Receipt

One seawater sample and one sediment sample was received for this project on June 23, 2011 (under CEL Work Order 11-06-1553). The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures, and the temperature of the samples were 5.5°C. Upon receipt at the lab, the samples were given laboratory identification numbers, logged into the Laboratory Information Management System (LIMS) and stored in refrigeration units pending elutriate preparation.

Elutriate Preparation

The elutriate sample was prepared in accordance with the Standard Elutriate Testing protocol (Inland Testing Manual, 2006), as follows.

Prior to use, all labware was thoroughly cleaned in accordance with standard laboratory operating procedures (detergent wash, acid bath, and rinse with D.I. water). Approximately eight liters of the site water was placed a commercial grade stainless steel mixing bowl. Using volumetric displacement, approximately two liters of sediment was added to the bowl with the site water. At room temperature, the mixture was stirred vigorously for 30 minutes. After mixing, the elutriate sample was allowed to settle for approximately one hour. The supernatant was then siphoned off and collected in clean glass containers. Approximately 6.0 to 7.0 liters of clear supernatant were decanted from the settled mixture.

The elutriate sample was centrifuged and transferred to new 1L amber glass containers (for all hydrocarbon determinations) and a 250mL HDPE container (for metals determination). The samples were then logged into LIMS given laboratory identification numbers, and stored in refrigeration units pending chemistry analysis.

Tests Performed

Trace Metals by EPA 1640
Mercury by EPA 7470A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs by EPA 8270C SIM
Organotins by Krone et al.

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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 tests.

Laboratory Control Samples

Laboratory Control Sample (LCS/LCSD) analyses were performed for each applicable method at the required frequencies, and all parameters were within the control limits for each method.

Matrix Spikes

Due to sample volume limitations, matrix spikes could not be performed for all analyses. Matrix spiking was performed for EPA 7470A Mercury and EPA 8270C SIM PAHs. All parameters were within the established control limits.

Surrogates

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

Acronyms

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8081A
		Units:	ug/L

Project: POLA Berths 167-169 / 1015101913.0001

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate-Sed	**11-06-1971-1-D**	**06/28/11 15:00**	**Sea Water**	**GC 41**	**07/01/11**	**07/05/11 11:43**	**110701L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Alpha-BHC	ND	0.050	1		4,4'-DDT	ND	0.050	1	
Gamma-BHC	ND	0.050	1		Endosulfan Sulfate	ND	0.050	1	
Beta-BHC	ND	0.050	1		Methoxychlor	ND	0.050	1	
Heptachlor	ND	0.050	1		Chlordane	ND	0.50	1	
Delta-BHC	ND	0.050	1		Toxaphene	ND	2.0	1	
Aldrin	ND	0.050	1		Endrin Ketone	ND	0.050	1	
Heptachlor Epoxide	ND	0.050	1		Alpha Chlordane	ND	0.050	1	
Endosulfan I	ND	0.050	1		Gamma Chlordane	ND	0.050	1	
Dieldrin	ND	0.050	1		2,4'-DDD	ND	0.050	1	
4,4'-DDE	ND	0.050	1		Trans-nonachlor	ND	0.050	1	
Endrin	ND	0.050	1		Cis-nonachlor	ND	0.050	1	
Endrin Aldehyde	ND	0.050	1		2,4'-DDE	ND	0.050	1	
4,4'-DDD	ND	0.050	1		2,4'-DDT	ND	0.050	1	
Endosulfan II	ND	0.050	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	77	50-135		2,4,5,6-Tetrachloro-m-Xylene	75	50-135	

Method Blank	**099-12-830-50**	**N/A**	**Aqueous**	**GC 41**	**07/01/11**	**07/05/11 10:57**	**110701L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Alpha-BHC	ND	0.050	1		4,4'-DDT	ND	0.050	1	
Gamma-BHC	ND	0.050	1		Endosulfan Sulfate	ND	0.050	1	
Beta-BHC	ND	0.050	1		Methoxychlor	ND	0.050	1	
Heptachlor	ND	0.050	1		Chlordane	ND	0.50	1	
Delta-BHC	ND	0.050	1		Toxaphene	ND	2.0	1	
Aldrin	ND	0.050	1		Endrin Ketone	ND	0.050	1	
Heptachlor Epoxide	ND	0.050	1		Alpha Chlordane	ND	0.050	1	
Endosulfan I	ND	0.050	1		Gamma Chlordane	ND	0.050	1	
Dieldrin	ND	0.050	1		2,4'-DDD	ND	0.050	1	
4,4'-DDE	ND	0.050	1		Trans-nonachlor	ND	0.050	1	
Endrin	ND	0.050	1		Cis-nonachlor	ND	0.050	1	
Endrin Aldehyde	ND	0.050	1		2,4'-DDE	ND	0.050	1	
4,4'-DDD	ND	0.050	1		2,4'-DDT	ND	0.050	1	
Endosulfan II	ND	0.050	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	94	50-135		2,4,5,6-Tetrachloro-m-Xylene	87	50-135	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PAHs
		Units:	ug/L

Project: POLA Berths 167-169 / 1015101913.0001

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate-Sed	**11-06-1971-1-E**	**06/28/11 15:00**	**Sea Water**	**GC/MS AAA**	**07/01/11**	**07/06/11 12:59**	**110701L13**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.20	1		Pyrene	1.9	0.20	1	
2-Methylnaphthalene	ND	0.20	1		Benzo (a) Anthracene	ND	0.20	1	
1-Methylnaphthalene	ND	0.20	1		Chrysene	ND	0.20	1	
Acenaphthylene	ND	0.20	1		Benzo (k) Fluoranthene	ND	0.20	1	
Acenaphthene	ND	0.20	1		Benzo (b) Fluoranthene	ND	0.20	1	
Fluorene	ND	0.20	1		Benzo (a) Pyrene	ND	0.20	1	
Phenanthrene	ND	0.20	1		Indeno (1,2,3-c,d) Pyrene	ND	0.20	1	
Anthracene	ND	0.20	1		Dibenz (a,h) Anthracene	ND	0.20	1	
Fluoranthene	0.35	0.20	1		Benzo (g,h,i) Perylene	ND	0.20	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Nitrobenzene-d5	77	28-139			2-Fluorobiphenyl	70	33-144		
p-Terphenyl-d14	66	23-160							

Method Blank	**099-06-008-370**	**N/A**	**Aqueous**	**GC/MS AAA**	**07/01/11**	**07/06/11 10:21**	**110701L13**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Naphthalene	ND	0.20	1		Pyrene	ND	0.20	1	
2-Methylnaphthalene	ND	0.20	1		Benzo (a) Anthracene	ND	0.20	1	
1-Methylnaphthalene	ND	0.20	1		Chrysene	ND	0.20	1	
Acenaphthylene	ND	0.20	1		Benzo (k) Fluoranthene	ND	0.20	1	
Acenaphthene	ND	0.20	1		Benzo (b) Fluoranthene	ND	0.20	1	
Fluorene	ND	0.20	1		Benzo (a) Pyrene	ND	0.20	1	
Phenanthrene	ND	0.20	1		Indeno (1,2,3-c,d) Pyrene	ND	0.20	1	
Anthracene	ND	0.20	1		Dibenz (a,h) Anthracene	ND	0.20	1	
Fluoranthene	ND	0.20	1		Benzo (g,h,i) Perylene	ND	0.20	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Nitrobenzene-d5	82	28-139			2-Fluorobiphenyl	63	33-144		
p-Terphenyl-d14	62	23-160							

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/L

Project: POLA Berths 167-169 / 1015101913.0001

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate-Sed	**11-06-1971-1-C**	**06/28/11 15:00**	**Sea Water**	**GC/MS HHH**	**07/01/11**	**07/06/11 18:23**	**110701L14**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	0.20	1		PCB184	ND	0.20	1	
PCB018	ND	0.20	1		PCB153	ND	0.20	1	
PCB052	ND	0.20	1		PCB168	ND	0.20	1	
PCB028	ND	0.20	1		PCB105	ND	0.20	1	
PCB049	ND	0.20	1		PCB138/158	ND	0.40	1	
PCB044	ND	0.20	1		PCB187	ND	0.20	1	
PCB037	ND	0.20	1		PCB183	ND	0.20	1	
PCB074	ND	0.20	1		PCB126	ND	0.20	1	
PCB070	ND	0.20	1		PCB128	ND	0.20	1	
PCB066	ND	0.20	1		PCB167	ND	0.20	1	
PCB101	ND	0.20	1		PCB177	ND	0.20	1	
PCB099	ND	0.20	1		PCB156	ND	0.20	1	
PCB119	ND	0.20	1		PCB157	ND	0.20	1	
PCB087	ND	0.20	1		PCB180	ND	0.20	1	
PCB081	ND	0.20	1		PCB170	ND	0.20	1	
PCB110	ND	0.20	1		PCB201	ND	0.20	1	
PCB151	ND	0.20	1		PCB169	ND	0.20	1	
PCB077	ND	0.20	1		PCB189	ND	0.20	1	
PCB149	ND	0.20	1		PCB195	ND	0.20	1	
PCB123	ND	0.20	1		PCB194	ND	0.20	1	
PCB118	ND	0.20	1		PCB206	ND	0.20	1	
PCB114	ND	0.20	1		PCB209	ND	0.20	1	

Surrogates:	REC (%)	Control Limits	Qual
p-Terphenyl-d14	111	30-160	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/L

Project: POLA Berths 167-169 / 1015101913.0001

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-935-8**	**N/A**	**Aqueous**	**GC/MS HHH**	**07/01/11**	**07/06/11 17:56**	**110701L14**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	0.20	1		PCB184	ND	0.20	1	
PCB018	ND	0.20	1		PCB153	ND	0.20	1	
PCB028	ND	0.20	1		PCB168	ND	0.20	1	
PCB052	ND	0.20	1		PCB105	ND	0.20	1	
PCB049	ND	0.20	1		PCB138/158	ND	0.40	1	
PCB044	ND	0.20	1		PCB187	ND	0.20	1	
PCB037	ND	0.20	1		PCB183	ND	0.20	1	
PCB074	ND	0.20	1		PCB126	ND	0.20	1	
PCB070	ND	0.20	1		PCB128	ND	0.20	1	
PCB066	ND	0.20	1		PCB167	ND	0.20	1	
PCB101	ND	0.20	1		PCB177	ND	0.20	1	
PCB099	ND	0.20	1		PCB156	ND	0.20	1	
PCB119	ND	0.20	1		PCB157	ND	0.20	1	
PCB087	ND	0.20	1		PCB180	ND	0.20	1	
PCB081	ND	0.20	1		PCB170	ND	0.20	1	
PCB110	ND	0.20	1		PCB201	ND	0.20	1	
PCB151	ND	0.20	1		PCB169	ND	0.20	1	
PCB077	ND	0.20	1		PCB189	ND	0.20	1	
PCB149	ND	0.20	1		PCB195	ND	0.20	1	
PCB123	ND	0.20	1		PCB194	ND	0.20	1	
PCB118	ND	0.20	1		PCB206	ND	0.20	1	
PCB114	ND	0.20	1		PCB209	ND	0.20	1	

Surrogates:	REC (%)	Control Limits	Qual
p-Terphenyl-d14	133	30-160	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	Organotins by Krone et al.
		Units:	ng/L

Project: POLA Berths 167-169 / 1015101913.0001

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate-Sed	**11-06-1971-1-H**	**06/28/11 15:00**	**Sea Water**	**GC/MS Y**	**07/05/11**	**07/07/11 11:24**	**110705L12**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	13	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	180	3.0	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	82	50-130	

Method Blank	099-07-035-149	N/A	Aqueous	GC/MS Y	07/05/11	07/07/11 10:52	110705L12

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Dibutyltin	ND	3.0	1		Tetrabutyltin	ND	3.0	1	
Monobutyltin	ND	3.0	1		Tributyltin	ND	3.0	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	81	50-130	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: POLA Berths 167-169 / 1015101913.0001

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate-Sed	**11-06-1971-1-B**	**06/28/11 15:00**	**Sea Water**	**Mercury**	**07/01/11**	**07/01/11 16:53**	**110701L07**

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

Method Blank	**099-12-457-230**	**N/A**	**Aqueous**	**Mercury**	**07/01/11**	**07/01/11 16:42**	**110701L07**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3005A Total
		Method:	EPA 1640
		Units:	ug/L
Project: POLA Berths 167-169 / 1015101913.0001			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Elutriate-Sed	**11-06-1971-1-A**	**06/28/11 15:00**	**Sea Water**	**ICP/MS 03**	**07/05/11**	**07/07/11 03:22**	**110705L05**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	7.87	0.0300	1		Nickel	6.57	0.0500	1	
Cadmium	0.0868	0.0300	1		Selenium	0.152	0.0500	1	
Chromium	0.467	0.200	1		Silver	0.372	0.0500	1	
Copper	1.11	0.0300	1		Zinc	3.20	1.00	1	
Lead	0.294	0.0300	1						

Method Blank	**099-13-067-59**	**N/A**	**Aqueous**	**ICP/MS 03**	**07/05/11**	**07/07/11 01:05**	**110705L05**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.0300	1		Nickel	ND	0.0500	1	
Cadmium	ND	0.0300	1		Selenium	ND	0.0500	1	
Chromium	ND	0.200	1		Silver	ND	0.0500	1	
Copper	ND	0.0300	1		Zinc	ND	1.00	1	
Lead	ND	0.0300	1						

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3005A Total
		Method:	EPA 1640

Project POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-06-2020-1	**Aqueous**	**ICP/MS 03**	**07/05/11**	**07/07/11**	**110705S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	90	75	50-150	4	0-20	
Cadmium	72	76	50-150	3	0-20	
Chromium	98	97	50-150	0	0-20	
Copper	85	103	50-150	5	0-20	
Lead	84	87	50-150	5	0-20	
Nickel	4X	4X	50-150	4X	0-20	Q
Selenium	90	92	50-150	2	0-20	
Silver	90	92	50-150	1	0-20	
Zinc	77	85	50-150	6	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Elutriate-Sed	**Sea Water**	**Mercury**	**07/01/11**	**07/01/11**	**110701S07**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	91	95	71-134	5	0-14	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Earth & Environmental		Date Received:	06/30/11
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PAHs

Project POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Elutriate-Sed	**Sea Water**	**GC/MS AAA**	**07/01/11**	**07/06/11**	**110701S13**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Naphthalene	83	83	21-133	0	0-25	
2-Methylnaphthalene	75	75	21-140	0	0-25	
1-Methylnaphthalene	75	76	20-140	1	0-25	
Acenaphthylene	81	81	33-145	1	0-25	
Acenaphthene	81	82	49-121	1	0-25	
Fluorene	87	86	59-121	1	0-25	
Phenanthrene	85	87	54-120	1	0-25	
Anthracene	70	70	27-133	0	0-25	
Fluoranthene	84	82	26-137	2	0-25	
Pyrene	87	90	18-168	1	0-25	
Benzo (a) Anthracene	82	81	33-143	1	0-25	
Chrysene	88	88	17-168	0	0-25	
Benzo (k) Fluoranthene	96	95	24-159	2	0-25	
Benzo (b) Fluoranthene	85	85	24-159	1	0-25	
Benzo (a) Pyrene	82	82	17-163	0	0-25	
Indeno (1,2,3-c,d) Pyrene	84	85	10-171	1	0-25	
Dibenz (a,h) Anthracene	84	85	10-219	1	0-25	
Benzo (g,h,i) Perylene	85	86	10-227	1	0-25	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3005A Total
		Method:	EPA 1640

Project: POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-067-59	**Aqueous**	**ICP/MS 03**	**07/05/11**	**07/07/11**	**110705L05**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	93	89	70-130	4	0-20	
Cadmium	82	84	70-130	3	0-20	
Chromium	108	107	70-130	1	0-20	
Copper	89	114	70-130	25	0-20	X
Lead	93	95	70-130	2	0-20	
Nickel	80	80	70-130	0	0-20	
Selenium	84	86	70-130	2	0-20	
Silver	88	88	70-130	0	0-20	
Zinc	94	95	70-130	1	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-457-230	**Aqueous**	**Mercury**	**07/01/11**	**07/01/11**	**110701L07**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	109	108	90-122	1	0-14	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8270C SIM PAHs

Project: POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-06-008-370	**Aqueous**	**GC/MS AAA**	**07/01/11**	**07/06/11**	**110701L13**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Naphthalene	82	82	21-133	2-152	0	0-25	
2-Methylnaphthalene	79	78	21-140	1-160	0	0-25	
1-Methylnaphthalene	84	84	20-140	0-160	0	0-25	
Acenaphthylene	88	88	33-145	14-164	1	0-25	
Acenaphthene	88	88	55-121	44-132	0	0-25	
Fluorene	93	93	59-121	49-131	0	0-25	
Phenanthrene	95	95	54-120	43-131	0	0-25	
Anthracene	78	78	27-133	9-151	0	0-25	
Fluoranthene	96	95	26-137	8-156	1	0-25	
Pyrene	101	102	45-129	31-143	1	0-25	
Benzo (a) Anthracene	94	94	33-143	15-161	0	0-25	
Chrysene	100	100	17-168	0-193	0	0-25	
Benzo (k) Fluoranthene	108	110	24-159	2-182	2	0-25	
Benzo (b) Fluoranthene	95	94	24-159	2-182	0	0-25	
Benzo (a) Pyrene	89	90	17-163	0-187	0	0-25	
Indeno (1,2,3-c,d) Pyrene	100	98	25-175	0-200	1	0-25	
Dibenz (a,h) Anthracene	98	97	25-175	0-200	1	0-25	
Benzo (g,h,i) Perylene	99	97	25-157	3-179	2	0-25	

Total number of LCS compounds : 18
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	Organotins by Krone et al.

Project: POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-035-149	**Aqueous**	**GC/MS Y**	**07/05/11**	**07/07/11**	**110705L12**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	92	93	50-130	1	0-20	
Tributyltin	74	79	50-130	6	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Earth & Environmental		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-06-1971
San Diego, CA 92123-4302		Preparation:	EPA 3510C
		Method:	EPA 8081A

Project: POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-830-50	**Aqueous**	**GC 41**	**07/01/11**	**07/05/11**	**110701L08**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Alpha-BHC	99	105	50-135	36-149	6	0-25	
Gamma-BHC	101	107	50-135	36-149	5	0-25	
Beta-BHC	97	103	50-135	36-149	6	0-25	
Heptachlor	96	97	50-135	36-149	1	0-25	
Delta-BHC	97	103	50-135	36-149	6	0-25	
Aldrin	92	92	50-135	36-149	1	0-25	
Heptachlor Epoxide	94	99	50-135	36-149	5	0-25	
Endosulfan I	94	99	50-135	36-149	5	0-25	
Dieldrin	94	99	50-135	36-149	5	0-25	
4,4'-DDE	95	100	50-135	36-149	5	0-25	
Endrin	92	97	50-135	36-149	6	0-25	
Endrin Aldehyde	96	101	50-135	36-149	5	0-25	
4,4'-DDD	93	97	50-135	36-149	5	0-25	
Endosulfan II	94	99	50-135	36-149	6	0-25	
4,4'-DDT	97	103	50-135	36-149	6	0-25	
Endosulfan Sulfate	91	96	50-135	36-149	6	0-25	
Methoxychlor	89	94	50-135	36-149	6	0-25	
Endrin Ketone	99	105	50-135	36-149	6	0-25	
Alpha Chlordane	93	97	50-135	36-149	4	0-25	
Gamma Chlordane	94	98	50-135	36-149	4	0-25	

Total number of LCS compounds : 20
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 11-06-1971
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: POLA Berths 167-169 / 1015101913.0001

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-935-8	**Aqueous**	**GC/MS HHH**	**07/01/11**	**07/06/11**	**110701L14**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
PCB008	45	37	30-160	8-182	20	0-50	
PCB018	47	40	30-160	8-182	15	0-50	
PCB028	50	47	30-160	8-182	5	0-50	
PCB052	49	47	30-160	8-182	4	0-50	
PCB044	51	50	30-160	8-182	3	0-50	
PCB066	53	52	30-160	8-182	2	0-50	
PCB101	53	52	30-160	8-182	1	0-50	
PCB077	53	53	30-160	8-182	1	0-50	
PCB118	56	55	30-160	8-182	1	0-50	
PCB153	53	52	30-160	8-182	1	0-50	
PCB105	53	52	30-160	8-182	1	0-50	
PCB187	53	53	30-160	8-182	0	0-50	
PCB126	50	49	30-160	8-182	1	0-50	
PCB128	51	51	30-160	8-182	0	0-50	
PCB180	53	53	30-160	8-182	0	0-50	
PCB170	50	50	30-160	8-182	1	0-50	
PCB195	50	52	30-160	8-182	4	0-50	
PCB206	47	52	30-160	8-182	9	0-50	
PCB209	45	52	30-160	8-182	13	0-50	

Total number of LCS compounds : 19
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-06-1971

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
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 (MS) or Matrix Spike Duplicate (MSD) 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 or PES/PESD 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 without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 · FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 6/29/2011

PAGE: 1 OF 1

LABORATORY CLIENT: AMEC Earth & Environmental

ADDRESS: 9210 Sky Park Court, Suite 200

CITY: San Diego, CA 92123

TEL: 858-300-4320

E-MAIL: Barry.Synder@amec.com

CLIENT PROJECT NAME / NUMBER: POLA Berths 167-169 / 1015101913.0001

PROJECT CONTACT: Barry Snyder

SAMPLER(S): (SIGNATURE)

P.O. NO.:

Temp Blank.:

LAB USE ONLY: 0 6 - 1 9 7 1

TURNAROUND TIME

☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☒ STANDARD

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)

☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS:

*As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Se, Ag, Zn

**MS/MSD FOR METALS, PAHS ~~AND PESTICIDES~~ BG ONLY

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	EPA 1640/7470A Metals*	EPA 8270C SIM PAHS	EOA 8270C SIM PCB CONGENERS	EPA 8081A OC PESTICIDES	ORGANOTINS	MS/MSD**	COMMENTS
1	Elutriate- Sed		6/28/11	15:00	SW		X	X	X	X	X	X	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Dannyle	[signature]	6/30/11	1156
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-06-1971

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 06/30/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.1 °C + 0.5 °C (CF) = 1.6 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter Initial: D.L

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: D.L

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: D.L

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☒ 6/30/11	☑	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB 6 ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☑250PB 2 ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** DL

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** WSC

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** WSC

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Additional Individual Core Sediment Chemistry

Calscience
Environmental & Marine Chemistry Laboratories

CALSCIENCE

WORK ORDER NUMBER: 11-08-0758

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: Port of Los Angeles - 1015101913

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

Approved for release on 08/18/2011 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, 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. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience
Environmental & Marine Chemistry Laboratories

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Work Order Number: 11-08-0758

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Calscience Environmental Laboratories, Inc.

CASE NARRATIVE

Calscience Work Order No.: 11-08-0758
Project Name: Port of Los Angeles / 1015101913

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the sediment samples.

Sample Condition on Receipt

Six sediment samples (housed in 16-oz glass containers) were received for this project on August 10, 2011. The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures. The temperature of the samples upon receipt at the laboratory was 2.4°C. All samples were given laboratory identification numbers, logged into the Laboratory Information Management System (LIMS) and then stored under refrigeration pending sediment chemistry testing in accordance with the project SAP.

Tests Performed

Oil and Grease by EPA 413.2M
TRPH by EPA 418.1M
Trace Metals by EPA 6020/7471A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs by EPA 8270C SIM
Total Solids by SM 2540B
Organotins by Krone et al.

Data Summary

The sample results and reporting limits were dry weight corrected.

All samples were homogenized prior to preparation and analysis.

<u>Holding times</u>

All holding times were met unless otherwise noted.

The samples were received past the EPA Method recommended holding times (in solid samples) for all analyses (with the exception of Trace Metals by EPA 6020). However, we have been advised by the client that these samples were frozen after collection (prior to receipt at the laboratory) and remained in that condition until received by Calscience. Calscience follows standard industry practice and Puget Sound Protocol, which states the holding times for sediment samples may be extended up to one year if kept frozen after collection. Therefore, the results have not been flagged as exceeding the EPA recommended holding times.

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Calibration

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

Reporting Limits

All Method Detection Limits were met. The Organotins and TRPH results were evaluated to the MDL, and where applicable, "J" flags were reported.

Blanks

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

Laboratory Control Samples

A Laboratory Control Sample (LCS) analysis was performed at the required frequencies, and unless otherwise noted, all parameters were within the established control limits.

Matrix Spikes

Matrix spike analyses were performed for each applicable analysis on both non-project samples and AMEC project samples. All parameters for the AMEC POLA sample matrix spikes were within the established control limits with the following exceptions.

Station 4-Top was used for Organotins matrix spiking and the Tetrabutyltin and Tributyltin matrix spikes and RPDs were outside the control limits. However, since the associated MSD, LCS and LCSD recoveries (plus LCS RPDs) were in control, the data are released with no further action.

Station 5-Bottom was used for the EPA 8081A Chlorinated Pesticides matrix spikes, and the MS, MSD and/or RPDs for several analytes exceeded the control limits due to matrix interference. Yet, since the LCS/LCSD recoveries and RPDs were within the control limits, the results are released with no further qualification.

EPA 8270C SIM PAH matrix spikes were performed on sample Station 5-Bottom and the MS, MSD and/or RPD recoveries for many PAHs fell outside their established control limits. The results have been flagged with the appropriate qualifiers and are released with no further action since the associated LCS/LCSD recoveries and RPDs were in control.

Surrogates

Surrogate recoveries for all applicable tests and samples were within the established control limits with the following exceptions.

The Decachlorobiphenyl surrogate recovery (by EPA 8081A) was above the established control limits in sample Station 4-Bottom due to matrix interference. However, since the

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surrogate recovery was confirmed by re-analysis, and the 2, 4, 5, 6-Tetrachloro-m-Xylene surrogate was within the control limits, the results are released with no further action.

Acronyms

LCS/LCSD- Laboratory Control Sample/Laboratory Control Sample Duplicate
PDS/PDSD- Post Digestion Spike/Post Digestion Spike Duplicate
MS/MSD- Matrix Spike/Matrix Spike Duplicate
ME-Marginal Exceedance
RPD- Relative Percent Difference

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Top	**11-08-0758-1-A**	**06/07/11 13:35**	**Sediment**	**N/A**	**08/11/11**	**08/11/11 14:00**	**B0811TSB2**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	58.0	0.100	1		%

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 4-Top	**11-08-0758-2-A**	**06/07/11 15:00**	**Sediment**	**N/A**	**08/11/11**	**08/11/11 14:00**	**B0811TSB2**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	63.4	0.100	1		%

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 5-Top	**11-08-0758-3-A**	**06/07/11 16:00**	**Sediment**	**N/A**	**08/11/11**	**08/11/11 14:00**	**B0811TSB2**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	64.9	0.100	1		%

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**N/A**	**08/11/11**	**08/11/11 14:00**	**B0811TSB2**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	53.6	0.100	1		%

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**N/A**	**08/11/11**	**08/11/11 14:00**	**B0811TSB2**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	69.7	0.100	1		%

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**N/A**	**08/11/11**	**08/11/11 14:00**	**B0811TSB2**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	69.9	0.100	1		%

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-05-019-1,707**	**N/A**	**Solid**	**N/A**	**08/11/11**	**08/11/11 14:00**	**B0811TSB2**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	ND	0.100	1		%

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 413.2M

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Top	**11-08-0758-1-A**	**06/07/11 13:35**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:37**	**110815L01**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	45	17	6.9	1		mg/kg

Station 4-Top	**11-08-0758-2-A**	**06/07/11 15:00**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:37**	**110815L01**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	56	16	6.3	1		mg/kg

Station 5-Top	**11-08-0758-3-A**	**06/07/11 16:00**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:37**	**110815L01**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	83	15	6.2	1		mg/kg

Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:37**	**110815L01**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	180	19	7.5	1		mg/kg

Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:37**	**110815L01**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	110	14	5.7	1		mg/kg

Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:37**	**110815L01**

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

Parameter	Result	RL	MDL	DF	Qual	Units
Oil and Grease	65	14	5.7	1		mg/kg

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 413.2M

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-07-019-97**	**N/A**	**Solid**	**IR #1**	**08/15/11**	**08/15/11 17:37**	**110815L01**

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	Units
Oil and Grease	ND	10	4.0	1		mg/kg

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7440 Lincoln Way, Garden Grove, CA 92841-1427 · TEL:(714) 895-5494 · FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 418.1M

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Top	**11-08-0758-1-A**	**06/07/11 13:35**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:19**	**110815L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	36	17	7.0	1		mg/kg

Station 4-Top	**11-08-0758-2-A**	**06/07/11 15:00**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:19**	**110815L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	36	16	6.4	1		mg/kg

Station 5-Top	**11-08-0758-3-A**	**06/07/11 16:00**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:19**	**110815L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	47	15	6.2	1		mg/kg

Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:19**	**110815L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	90	19	7.5	1		mg/kg

Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:19**	**110815L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	62	14	5.8	1		mg/kg

Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**IR #1**	**08/15/11**	**08/15/11 17:19**	**110815L02**

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

Parameter	Result	RL	MDL	DF	Qual	Units
TRPH	51	14	5.8	1		mg/kg

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 418.1M

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-07-015-1,783**	**N/A**	**Solid**	**IR #1**	**08/15/11**	**08/15/11 17:19**	**110815L02**

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	Units
TRPH	ND	10	4.0	1		mg/kg

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Top	**11-08-0758-1-A**	**06/07/11 13:35**	**Sediment**	**GC 51**	**08/11/11**	**08/16/11 14:54**	**110811L15A**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.7	1		Endosulfan II	ND	1.7	1	
Alpha-BHC	ND	1.7	1		Endosulfan Sulfate	ND	1.7	1	
Beta-BHC	ND	1.7	1		Endrin	ND	1.7	1	
Delta-BHC	ND	1.7	1		Endrin Aldehyde	ND	1.7	1	
Gamma-BHC	ND	1.7	1		Endrin Ketone	ND	1.7	1	
Chlordane	ND	17	1		Heptachlor	ND	1.7	1	
Dieldrin	ND	1.7	1		Heptachlor Epoxide	ND	1.7	1	
Trans-nonachlor	ND	1.7	1		Methoxychlor	ND	1.7	1	
2,4'-DDD	ND	1.7	1		Toxaphene	ND	34	1	
2,4'-DDE	ND	1.7	1		Alpha Chlordane	ND	1.7	1	
2,4'-DDT	ND	1.7	1		Oxychlordane	ND	1.7	1	
4,4'-DDD	ND	1.7	1		Gamma Chlordane	ND	1.7	1	
4,4'-DDE	2.9	1.7	1		Cis-nonachlor	ND	1.7	1	
4,4'-DDT	ND	1.7	1		Total DDTs	2.9	1.7	1	
Endosulfan I	ND	1.7	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	65	50-130		Decachlorobiphenyl	61	50-130	

Station 4-Top	**11-08-0758-2-A**	**06/07/11 15:00**	**Sediment**	**GC 51**	**08/11/11**	**08/15/11 12:22**	**110811L15A**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.6	1		Endosulfan II	ND	1.6	1	
Alpha-BHC	ND	1.6	1		Endosulfan Sulfate	ND	1.6	1	
Beta-BHC	ND	1.6	1		Endrin	ND	1.6	1	
Delta-BHC	ND	1.6	1		Endrin Aldehyde	ND	1.6	1	
Gamma-BHC	ND	1.6	1		Endrin Ketone	ND	1.6	1	
Chlordane	ND	16	1		Heptachlor	ND	1.6	1	
Dieldrin	ND	1.6	1		Heptachlor Epoxide	ND	1.6	1	
Trans-nonachlor	ND	1.6	1		Methoxychlor	ND	1.6	1	
2,4'-DDD	ND	1.6	1		Toxaphene	ND	32	1	
2,4'-DDE	ND	1.6	1		Alpha Chlordane	ND	1.6	1	
2,4'-DDT	ND	1.6	1		Gamma Chlordane	ND	1.6	1	
4,4'-DDD	ND	1.6	1		Oxychlordane	ND	1.6	1	
4,4'-DDE	7.8	1.6	1		Cis-nonachlor	ND	1.6	1	
4,4'-DDT	ND	1.6	1		Total DDTs	7.8	1.6	1	
Endosulfan I	ND	1.6	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	65	50-130		Decachlorobiphenyl	68	50-130	

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

7440 Lincoln Way, Garden Grove, CA 92841-1427 · TEL:(714) 895-5494 · FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 5-Top	**11-08-0758-3-A**	**06/07/11 16:00**	**Sediment**	**GC 51**	**08/11/11**	**08/15/11 12:36**	**110811L15A**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.5	1		Endosulfan II	ND	1.5	1	
Alpha-BHC	ND	1.5	1		Endosulfan Sulfate	ND	1.5	1	
Beta-BHC	ND	1.5	1		Endrin	ND	1.5	1	
Delta-BHC	ND	1.5	1		Endrin Aldehyde	ND	1.5	1	
Gamma-BHC	ND	1.5	1		Endrin Ketone	ND	1.5	1	
Chlordane	ND	15	1		Heptachlor	ND	1.5	1	
Dieldrin	ND	1.5	1		Heptachlor Epoxide	ND	1.5	1	
Trans-nonachlor	ND	1.5	1		Methoxychlor	ND	1.5	1	
2,4'-DDD	ND	1.5	1		Toxaphene	ND	31	1	
2,4'-DDE	2.3	1.5	1		Alpha Chlordane	ND	1.5	1	
2,4'-DDT	ND	1.5	1		Oxychlordane	ND	1.5	1	
4,4'-DDD	ND	1.5	1		Gamma Chlordane	ND	1.5	1	
4,4'-DDE	15	3.1	2		Cis-nonachlor	ND	1.5	1	
4,4'-DDT	ND	1.5	1		Total DDTs	17	1.5	1	
Endosulfan I	ND	1.5	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	82	50-130		Decachlorobiphenyl	73	50-130	

Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**GC 51**	**08/11/11**	**08/15/11 15:31**	**110811L15A**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.9	1		Endosulfan II	ND	1.9	1	
Alpha-BHC	ND	1.9	1		Endosulfan Sulfate	ND	1.9	1	
Beta-BHC	ND	1.9	1		Endrin	ND	1.9	1	
Delta-BHC	ND	1.9	1		Endrin Aldehyde	ND	1.9	1	
Gamma-BHC	ND	1.9	1		Endrin Ketone	ND	1.9	1	
Chlordane	ND	19	1		Heptachlor	ND	1.9	1	
Dieldrin	ND	1.9	1		Heptachlor Epoxide	ND	1.9	1	
Trans-nonachlor	ND	1.9	1		Methoxychlor	ND	1.9	1	
2,4'-DDD	ND	1.9	1		Toxaphene	ND	37	1	
2,4'-DDE	ND	1.9	1		Alpha Chlordane	ND	1.9	1	
2,4'-DDT	ND	1.9	1		Oxychlordane	ND	1.9	1	
4,4'-DDD	ND	1.9	1		Gamma Chlordane	ND	1.9	1	
4,4'-DDE	5.7	1.9	1		Cis-nonachlor	ND	1.9	1	
4,4'-DDT	ND	1.9	1		Total DDTs	5.7	1.9	1	
Endosulfan I	ND	1.9	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	88	50-130		Decachlorobiphenyl	75	50-130	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**GC 51**	**08/11/11**	**08/15/11 15:46**	**110811L15A**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.4	1		Endosulfan II	ND	1.4	1	
Alpha-BHC	ND	1.4	1		Endosulfan Sulfate	ND	1.4	1	
Beta-BHC	ND	1.4	1		Endrin	ND	1.4	1	
Delta-BHC	ND	1.4	1		Endrin Aldehyde	ND	1.4	1	
Gamma-BHC	ND	1.4	1		Endrin Ketone	ND	1.4	1	
Chlordane	ND	14	1		Heptachlor	ND	1.4	1	
Dieldrin	ND	1.4	1		Heptachlor Epoxide	ND	1.4	1	
Trans-nonachlor	ND	1.4	1		Methoxychlor	ND	1.4	1	
2,4'-DDD	1.8	1.4	1		Toxaphene	ND	29	1	
2,4'-DDE	8.9	1.4	1		Alpha Chlordane	ND	1.4	1	
2,4'-DDT	ND	1.4	1		Gamma Chlordane	ND	1.4	1	
4,4'-DDD	ND	1.4	1		Oxychlordane	ND	1.4	1	
4,4'-DDE	130	29	20		Cis-nonachlor	ND	1.4	1	
4,4'-DDT	ND	1.4	1		Total DDTs	140	1.4	1	
Endosulfan I	ND	1.4	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	129	50-130		Decachlorobiphenyl	138	50-130	2,7

Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**GC 51**	**08/11/11**	**08/15/11 16:00**	**110811L15A**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.4	1		Endosulfan II	ND	1.4	1	
Alpha-BHC	ND	1.4	1		Endosulfan Sulfate	ND	1.4	1	
Beta-BHC	ND	1.4	1		Endrin	ND	1.4	1	
Delta-BHC	ND	1.4	1		Endrin Aldehyde	ND	1.4	1	
Gamma-BHC	ND	1.4	1		Endrin Ketone	ND	1.4	1	
Chlordane	ND	14	1		Heptachlor	ND	1.4	1	
Dieldrin	ND	1.4	1		Heptachlor Epoxide	ND	1.4	1	
Trans-nonachlor	ND	1.4	1		Methoxychlor	ND	1.4	1	
2,4'-DDD	ND	1.4	1		Toxaphene	ND	29	1	
2,4'-DDE	3.3	1.4	1		Alpha Chlordane	ND	1.4	1	
2,4'-DDT	ND	1.4	1		Oxychlordane	ND	1.4	1	
4,4'-DDD	5.1	1.4	1		Gamma Chlordane	ND	1.4	1	
4,4'-DDE	28	7.2	5		Cis-nonachlor	ND	1.4	1	
4,4'-DDT	9.1	1.4	1		Total DDTs	46	1.4	1	
Endosulfan I	ND	1.4	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	64	50-130		Decachlorobiphenyl	60	50-130	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-858-106**	**N/A**	**Solid**	**GC 51**	**08/11/11**	**08/15/11 11:53**	**110811L15A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.0	1		Endosulfan II	ND	1.0	1	
Alpha-BHC	ND	1.0	1		Endosulfan Sulfate	ND	1.0	1	
Beta-BHC	ND	1.0	1		Endrin	ND	1.0	1	
Delta-BHC	ND	1.0	1		Endrin Aldehyde	ND	1.0	1	
Gamma-BHC	ND	1.0	1		Endrin Ketone	ND	1.0	1	
Chlordane	ND	10	1		Heptachlor	ND	1.0	1	
Dieldrin	ND	1.0	1		Heptachlor Epoxide	ND	1.0	1	
Trans-nonachlor	ND	1.0	1		Methoxychlor	ND	1.0	1	
2,4'-DDD	ND	1.0	1		Toxaphene	ND	20	1	
2,4'-DDE	ND	1.0	1		Alpha Chlordane	ND	1.0	1	
2,4'-DDT	ND	1.0	1		Oxychlordane	ND	1.0	1	
4,4'-DDD	ND	1.0	1		Gamma Chlordane	ND	1.0	1	
4,4'-DDE	ND	1.0	1		Cis-nonachlor	ND	1.0	1	
4,4'-DDT	ND	1.0	1		Total DDTs	ND	1.0	1	
Endosulfan I	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	100	50-130		Decachlorobiphenyl	86	50-130	

Return to Contents

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**GC/MS BBB**	**08/11/11**	**08/15/11 20:27**	**110811L13**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	19	1		Fluoranthene	650	19	1	
Acenaphthylene	100	19	1		Fluorene	36	19	1	
Anthracene	320	19	1		Indeno (1,2,3-c,d) Pyrene	300	19	1	
Benzo (a) Anthracene	480	19	1		2-Methylnaphthalene	ND	19	1	
Benzo (a) Pyrene	1200	190	10		1-Methylnaphthalene	ND	19	1	
Benzo (b) Fluoranthene	1500	190	10		1-Methylphenanthrene	ND	19	1	
Benzo (e) Pyrene	710	19	1		Naphthalene	ND	19	1	
Benzo (g,h,i) Perylene	270	19	1		Perylene	260	19	1	
Benzo (k) Fluoranthene	1300	190	10		Phenanthrene	120	19	1	
Biphenyl	ND	19	1		Pyrene	4000	190	10	
Chrysene	1300	190	10		1,6,7-Trimethylnaphthalene	ND	19	1	
Dibenz (a,h) Anthracene	99	19	1		Total PAHs	12000	19	1	
2,6-Dimethylnaphthalene	ND	19	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	56	14-146		Nitrobenzene-d5	89	18-162	
p-Terphenyl-d14	77	34-148					

Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**GC/MS BBB**	**08/11/11**	**08/15/11 22:07**	**110811L13**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	1800	720	50		Fluoranthene	9200	720	50	
Acenaphthylene	280	14	1		Fluorene	700	14	1	
Anthracene	1800	720	50		Indeno (1,2,3-c,d) Pyrene	370	14	1	
Benzo (a) Anthracene	2700	720	50		2-Methylnaphthalene	76	14	1	
Benzo (a) Pyrene	2100	720	50		1-Methylnaphthalene	360	14	1	
Benzo (b) Fluoranthene	2700	720	50		1-Methylphenanthrene	670	14	1	
Benzo (e) Pyrene	1400	720	50		Naphthalene	390	14	1	
Benzo (g,h,i) Perylene	300	14	1		Perylene	430	14	1	
Benzo (k) Fluoranthene	2000	720	50		Phenanthrene	2800	720	50	
Biphenyl	60	14	1		Pyrene	9100	720	50	
Chrysene	4000	720	50		1,6,7-Trimethylnaphthalene	28	14	1	
Dibenz (a,h) Anthracene	150	14	1		Total PAHs	41000	14	1	
2,6-Dimethylnaphthalene	71	14	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	69	14-146		Nitrobenzene-d5	83	18-162	
p-Terphenyl-d14	66	34-148					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**GC/MS BBB**	**08/11/11**	**08/15/11 21:42**	**110811L13**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	14	1		Fluoranthene	680	14	1	
Acenaphthylene	75	14	1		Fluorene	25	14	1	
Anthracene	340	14	1		Indeno (1,2,3-c,d) Pyrene	310	14	1	
Benzo (a) Anthracene	1300	140	10		2-Methylnaphthalene	ND	14	1	
Benzo (a) Pyrene	1300	140	10		1-Methylnaphthalene	ND	14	1	
Benzo (b) Fluoranthene	1200	140	10		1-Methylphenanthrene	71	14	1	
Benzo (e) Pyrene	630	14	1		Naphthalene	15	14	1	
Benzo (g,h,i) Perylene	260	14	1		Perylene	250	14	1	
Benzo (k) Fluoranthene	1200	140	10		Phenanthrene	90	14	1	
Biphenyl	ND	14	1		Pyrene	2400	140	10	
Chrysene	1700	140	10		1,6,7-Trimethylnaphthalene	ND	14	1	
Dibenz (a,h) Anthracene	120	14	1		Total PAHs	11000	14	1	
2,6-Dimethylnaphthalene	18	14	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	108	14-146		Nitrobenzene-d5	134	18-162	
p-Terphenyl-d14	74	34-148					

Method Blank	**099-14-097-56**	**N/A**	**Solid**	**GC/MS BBB**	**08/11/11**	**08/15/11 17:32**	**110811L13**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acenaphthene	ND	10	1		2,6-Dimethylnaphthalene	ND	10	1	
Acenaphthylene	ND	10	1		Fluoranthene	ND	10	1	
Anthracene	ND	10	1		Fluorene	ND	10	1	
Benzo (a) Anthracene	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	
Benzo (a) Pyrene	ND	10	1		2-Methylnaphthalene	ND	10	1	
Benzo (b) Fluoranthene	ND	10	1		1-Methylnaphthalene	ND	10	1	
Benzo (e) Pyrene	ND	10	1		1-Methylphenanthrene	ND	10	1	
Benzo (g,h,i) Perylene	ND	10	1		Naphthalene	ND	10	1	
Benzo (k) Fluoranthene	ND	10	1		Perylene	ND	10	1	
Biphenyl	ND	10	1		Phenanthrene	ND	10	1	
Chrysene	ND	10	1		Pyrene	ND	10	1	
Dibenz (a,h) Anthracene	ND	10	1		1,6,7-Trimethylnaphthalene	ND	10	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	96	14-146		Nitrobenzene-d5	112	18-162	
p-Terphenyl-d14	92	34-148					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Top	**11-08-0758-1-A**	**06/07/11 13:35**	**Sediment**	**GC/MS HHH**	**08/11/11**	**08/16/11 19:08**	**110811L17**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.7	1		PCB128	ND	1.7	1	
PCB018	2.8	1.7	1		PCB132	ND	1.7	1	
PCB028	6.0	1.7	1		PCB138/158	4.2	1.7	1	
PCB031	ND	1.7	1		PCB141	ND	1.7	1	
PCB033	ND	1.7	1		PCB149	2.3	1.7	1	
PCB037	ND	1.7	1		PCB151	ND	1.7	1	
PCB044	3.1	1.7	1		PCB153	4.0	1.7	1	
PCB049	22	1.7	1		PCB156	ND	1.7	1	
PCB052	3.0	1.7	1		PCB157	ND	1.7	1	
PCB056	ND	1.7	1		PCB167	ND	1.7	1	
PCB060	ND	1.7	1		PCB168	ND	1.7	1	
PCB066	ND	1.7	1		PCB169	ND	1.7	1	
PCB070	ND	1.7	1		PCB170	ND	1.7	1	
PCB074	ND	1.7	1		PCB174	ND	1.7	1	
PCB077	ND	1.7	1		PCB177	ND	1.7	1	
PCB081	ND	1.7	1		PCB180	1.9	1.7	1	
PCB087	1.8	1.7	1		PCB183	ND	1.7	1	
PCB095	2.1	1.7	1		PCB184	ND	1.7	1	
PCB097	5.3	1.7	1		PCB187	ND	1.7	1	
PCB099	ND	1.7	1		PCB189	ND	1.7	1	
PCB101	4.2	1.7	1		PCB194	ND	1.7	1	
PCB105	ND	1.7	1		PCB195	ND	1.7	1	
PCB110	2.1	1.7	1		PCB200	ND	1.7	1	
PCB114	ND	1.7	1		PCB201	ND	1.7	1	
PCB118	2.1	1.7	1		PCB203	ND	1.7	1	
PCB119	ND	1.7	1		PCB206	ND	1.7	1	
PCB123	ND	1.7	1		PCB209	ND	1.7	1	
PCB126	ND	1.7	1		Total PCB Congeners	67	1.7	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	119	50-125		p-Terphenyl-d14	117	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 4-Top	**11-08-0758-2-A**	**06/07/11 15:00**	**Sediment**	**GC/MS HHH**	**08/11/11**	**08/16/11 19:35**	**110811L17**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.6	1		PCB128	2.1	1.6	1	
PCB018	2.4	1.6	1		PCB132	ND	1.6	1	
PCB028	4.5	1.6	1		PCB138/158	9.2	1.6	1	
PCB031	ND	1.6	1		PCB141	1.7	1.6	1	
PCB033	ND	1.6	1		PCB149	5.5	1.6	1	
PCB037	ND	1.6	1		PCB151	2.3	1.6	1	
PCB044	3.8	1.6	1		PCB153	8.6	1.6	1	
PCB049	14	1.6	1		PCB156	1.8	1.6	1	
PCB052	4.0	1.6	1		PCB157	2.4	1.6	1	
PCB056	ND	1.6	1		PCB167	ND	1.6	1	
PCB060	ND	1.6	1		PCB168	ND	1.6	1	
PCB066	2.3	1.6	1		PCB169	ND	1.6	1	
PCB070	2.3	1.6	1		PCB170	2.9	1.6	1	
PCB074	ND	1.6	1		PCB174	2.1	1.6	1	
PCB077	ND	1.6	1		PCB177	ND	1.6	1	
PCB081	ND	1.6	1		PCB180	3.8	1.6	1	
PCB087	3.3	1.6	1		PCB183	ND	1.6	1	
PCB095	5.2	1.6	1		PCB184	ND	1.6	1	
PCB097	6.1	1.6	1		PCB187	2.3	1.6	1	
PCB099	2.2	1.6	1		PCB189	ND	1.6	1	
PCB101	7.7	1.6	1		PCB194	1.7	1.6	1	
PCB105	4.7	1.6	1		PCB195	ND	1.6	1	
PCB110	6.1	1.6	1		PCB200	ND	1.6	1	
PCB114	3.2	1.6	1		PCB201	ND	1.6	1	
PCB118	6.3	1.6	1		PCB203	ND	1.6	1	
PCB119	ND	1.6	1		PCB206	ND	1.6	1	
PCB123	ND	1.6	1		PCB209	ND	1.6	1	
PCB126	2.0	1.6	1		Total PCB Congeners	130	1.6	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	107	50-125		p-Terphenyl-d14	88	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 5-Top	**11-08-0758-3-A**	**06/07/11 16:00**	**Sediment**	**GC/MS HHH**	**08/11/11**	**08/16/11 20:02**	**110811L17**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.5	1		PCB128	2.7	1.5	1	
PCB018	2.2	1.5	1		PCB132	ND	1.5	1	
PCB028	5.0	1.5	1		PCB138/158	15	1.5	1	
PCB031	ND	1.5	1		PCB141	2.3	1.5	1	
PCB033	2.1	1.5	1		PCB149	8.6	1.5	1	
PCB037	ND	1.5	1		PCB151	2.8	1.5	1	
PCB044	5.7	1.5	1		PCB153	13	1.5	1	
PCB049	10	1.5	1		PCB156	2.1	1.5	1	
PCB052	7.2	1.5	1		PCB157	2.8	1.5	1	
PCB056	ND	1.5	1		PCB167	ND	1.5	1	
PCB060	ND	1.5	1		PCB168	ND	1.5	1	
PCB066	4.0	1.5	1		PCB169	ND	1.5	1	
PCB070	4.0	1.5	1		PCB170	3.0	1.5	1	
PCB074	1.8	1.5	1		PCB174	2.6	1.5	1	
PCB077	ND	1.5	1		PCB177	ND	1.5	1	
PCB081	ND	1.5	1		PCB180	5.2	1.5	1	
PCB087	5.0	1.5	1		PCB183	ND	1.5	1	
PCB095	8.3	1.5	1		PCB184	ND	1.5	1	
PCB097	7.2	1.5	1		PCB187	2.9	1.5	1	
PCB099	3.8	1.5	1		PCB189	ND	1.5	1	
PCB101	13	1.5	1		PCB194	ND	1.5	1	
PCB105	5.9	1.5	1		PCB195	ND	1.5	1	
PCB110	11	1.5	1		PCB200	ND	1.5	1	
PCB114	1.6	1.5	1		PCB201	ND	1.5	1	
PCB118	11	1.5	1		PCB203	ND	1.5	1	
PCB119	ND	1.5	1		PCB206	ND	1.5	1	
PCB123	1.7	1.5	1		PCB209	ND	1.5	1	
PCB126	ND	1.5	1		Total PCB Congeners	170	1.5	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	97	50-125		p-Terphenyl-d14	98	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**GC/MS HHH**	**08/11/11**	**08/16/11 20:29**	**110811L17**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.9	1		PCB128	ND	1.9	1	
PCB018	3.0	1.9	1		PCB132	ND	1.9	1	
PCB028	7.3	1.9	1		PCB138/158	5.3	1.9	1	
PCB031	ND	1.9	1		PCB141	ND	1.9	1	
PCB033	ND	1.9	1		PCB149	3.2	1.9	1	
PCB037	2.7	1.9	1		PCB151	2.0	1.9	1	
PCB044	4.5	1.9	1		PCB153	4.3	1.9	1	
PCB049	27	1.9	1		PCB156	ND	1.9	1	
PCB052	5.3	1.9	1		PCB157	2.0	1.9	1	
PCB056	ND	1.9	1		PCB167	ND	1.9	1	
PCB060	ND	1.9	1		PCB168	ND	1.9	1	
PCB066	ND	1.9	1		PCB169	ND	1.9	1	
PCB070	2.0	1.9	1		PCB170	ND	1.9	1	
PCB074	ND	1.9	1		PCB174	ND	1.9	1	
PCB077	ND	1.9	1		PCB177	ND	1.9	1	
PCB081	ND	1.9	1		PCB180	2.3	1.9	1	
PCB087	2.6	1.9	1		PCB183	ND	1.9	1	
PCB095	3.1	1.9	1		PCB184	ND	1.9	1	
PCB097	7.7	1.9	1		PCB187	ND	1.9	1	
PCB099	ND	1.9	1		PCB189	ND	1.9	1	
PCB101	6.2	1.9	1		PCB194	ND	1.9	1	
PCB105	5.9	1.9	1		PCB195	ND	1.9	1	
PCB110	2.9	1.9	1		PCB200	ND	1.9	1	
PCB114	ND	1.9	1		PCB201	ND	1.9	1	
PCB118	3.1	1.9	1		PCB203	ND	1.9	1	
PCB119	ND	1.9	1		PCB206	ND	1.9	1	
PCB123	ND	1.9	1		PCB209	ND	1.9	1	
PCB126	ND	1.9	1		Total PCB Congeners	100	1.9	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	100	50-125		p-Terphenyl-d14	88	50-125	

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

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**GC/MS HHH**	**08/11/11**	**08/16/11 20:56**	**110811L17**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.4	1		PCB128	11	1.4	1	
PCB018	5.6	1.4	1		PCB132	ND	1.4	1	
PCB028	8.5	1.4	1		PCB138/158	54	1.4	1	
PCB031	ND	1.4	1		PCB141	12	1.4	1	
PCB033	ND	1.4	1		PCB149	30	1.4	1	
PCB037	ND	1.4	1		PCB151	7.1	1.4	1	
PCB044	13	1.4	1		PCB153	47	1.4	1	
PCB049	17	1.4	1		PCB156	7.0	1.4	1	
PCB052	27	1.4	1		PCB157	6.9	1.4	1	
PCB056	3.5	1.4	1		PCB167	1.9	1.4	1	
PCB060	ND	1.4	1		PCB168	ND	1.4	1	
PCB066	8.5	1.4	1		PCB169	1.6	1.4	1	
PCB070	15	1.4	1		PCB170	7.6	1.4	1	
PCB074	4.8	1.4	1		PCB174	7.1	1.4	1	
PCB077	2.8	1.4	1		PCB177	3.1	1.4	1	
PCB081	ND	1.4	1		PCB180	14	1.4	1	
PCB087	19	1.4	1		PCB183	3.5	1.4	1	
PCB095	33	1.4	1		PCB184	ND	1.4	1	
PCB097	23	1.4	1		PCB187	7.3	1.4	1	
PCB099	14	1.4	1		PCB189	ND	1.4	1	
PCB101	50	1.4	1		PCB194	2.6	1.4	1	
PCB105	20	1.4	1		PCB195	ND	1.4	1	
PCB110	43	1.4	1		PCB200	ND	1.4	1	
PCB114	3.0	1.4	1		PCB201	ND	1.4	1	
PCB118	38	1.4	1		PCB203	2.8	1.4	1	
PCB119	1.6	1.4	1		PCB206	1.9	1.4	1	
PCB123	5.2	1.4	1		PCB209	ND	1.4	1	
PCB126	ND	1.4	1		Total PCB Congeners	580	1.4	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	81	50-125		p-Terphenyl-d14	81	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**GC/MS HHH**	**08/11/11**	**08/17/11 15:39**	**110811L17**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.4	1		PCB128	6.5	1.4	1	
PCB018	ND	1.4	1		PCB132	ND	1.4	1	
PCB028	3.7	1.4	1		PCB138/158	33	1.4	1	
PCB031	ND	1.4	1		PCB141	7.0	1.4	1	
PCB033	ND	1.4	1		PCB149	19	1.4	1	
PCB037	ND	1.4	1		PCB151	4.8	1.4	1	
PCB044	9.0	1.4	1		PCB153	31	1.4	1	
PCB049	12	1.4	1		PCB156	4.2	1.4	1	
PCB052	13	1.4	1		PCB157	4.2	1.4	1	
PCB056	4.5	1.4	1		PCB167	ND	1.4	1	
PCB060	2.3	1.4	1		PCB168	ND	1.4	1	
PCB066	8.5	1.4	1		PCB169	ND	1.4	1	
PCB070	9.8	1.4	1		PCB170	6.9	1.4	1	
PCB074	4.6	1.4	1		PCB174	5.3	1.4	1	
PCB077	2.2	1.4	1		PCB177	2.1	1.4	1	
PCB081	ND	1.4	1		PCB180	11	1.4	1	
PCB087	11	1.4	1		PCB183	2.6	1.4	1	
PCB095	19	1.4	1		PCB184	ND	1.4	1	
PCB097	13	1.4	1		PCB187	6.0	1.4	1	
PCB099	10	1.4	1		PCB189	ND	1.4	1	
PCB101	29	1.4	1		PCB194	2.9	1.4	1	
PCB105	13	1.4	1		PCB195	ND	1.4	1	
PCB110	25	1.4	1		PCB200	ND	1.4	1	
PCB114	ND	1.4	1		PCB201	ND	1.4	1	
PCB118	26	1.4	1		PCB203	2.6	1.4	1	
PCB119	ND	1.4	1		PCB206	1.8	1.4	1	
PCB123	2.1	1.4	1		PCB209	ND	1.4	1	
PCB126	ND	1.4	1		Total PCB Congeners	370	1.4	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	113	50-125		p-Terphenyl-d14	77	50-125	

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

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-417-3**	**N/A**	**Solid**	**GC/MS HHH**	**08/11/11**	**08/15/11 13:16**	**110811L17**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.0	1		PCB128	ND	1.0	1	
PCB018	ND	1.0	1		PCB132	ND	1.0	1	
PCB028	ND	1.0	1		PCB138/158	ND	1.0	1	
PCB031	ND	1.0	1		PCB141	ND	1.0	1	
PCB033	ND	1.0	1		PCB149	ND	1.0	1	
PCB037	ND	1.0	1		PCB151	ND	1.0	1	
PCB044	ND	1.0	1		PCB153	ND	1.0	1	
PCB049	ND	1.0	1		PCB156	ND	1.0	1	
PCB052	ND	1.0	1		PCB157	ND	1.0	1	
PCB056	ND	1.0	1		PCB167	ND	1.0	1	
PCB060	ND	1.0	1		PCB168	ND	1.0	1	
PCB066	ND	1.0	1		PCB169	ND	1.0	1	
PCB070	ND	1.0	1		PCB170	ND	1.0	1	
PCB074	ND	1.0	1		PCB174	ND	1.0	1	
PCB077	ND	1.0	1		PCB177	ND	1.0	1	
PCB081	ND	1.0	1		PCB180	ND	1.0	1	
PCB087	ND	1.0	1		PCB183	ND	1.0	1	
PCB095	ND	1.0	1		PCB184	ND	1.0	1	
PCB097	ND	1.0	1		PCB187	ND	1.0	1	
PCB099	ND	1.0	1		PCB189	ND	1.0	1	
PCB101	ND	1.0	1		PCB194	ND	1.0	1	
PCB105	ND	1.0	1		PCB195	ND	1.0	1	
PCB110	ND	1.0	1		PCB200	ND	1.0	1	
PCB114	ND	1.0	1		PCB201	ND	1.0	1	
PCB118	ND	1.0	1		PCB203	ND	1.0	1	
PCB119	ND	1.0	1		PCB206	ND	1.0	1	
PCB123	ND	1.0	1		PCB209	ND	1.0	1	
PCB126	ND	1.0	1		Total PCB Congeners	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	117	50-125		p-Terphenyl-d14	107	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: Port of Los Angeles - 1015101913			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Top	**11-08-0758-1-A**	**06/07/11 13:35**	**Sediment**	**GC/MS Y**	**08/11/11**	**08/12/11 20:24**	**110811L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	5.2	1.0	1		Tetrabutyltin	ND	5.2	0.62	1	
Monobutyltin	ND	5.2	1.7	1		Tributyltin	210	5.2	0.58	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	94	50-130	

Station 4-Top	**11-08-0758-2-A**	**06/07/11 15:00**	**Sediment**	**GC/MS Y**	**08/11/11**	**08/12/11 20:56**	**110811L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	21	4.7	0.95	1		Tetrabutyltin	ND	4.7	0.56	1	
Monobutyltin	ND	4.7	1.5	1		Tributyltin	45	4.7	0.53	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	93	50-130	

Station 5-Top	**11-08-0758-3-A**	**06/07/11 16:00**	**Sediment**	**GC/MS Y**	**08/11/11**	**08/12/11 21:28**	**110811L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	22	4.6	0.92	1		Tetrabutyltin	ND	4.6	0.55	1	
Monobutyltin	ND	4.6	1.5	1		Tributyltin	21	4.6	0.52	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	87	50-130	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: Port of Los Angeles - 1015101913			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**GC/MS Y**	**08/11/11**	**08/16/11 14:21**	**110811L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	28	5.6	5		Tetrabutyltin	ND	28	3.3	5	
Monobutyltin	ND	28	9.1	5		Tributyltin	530	28	3.1	5	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	79	50-130	

Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**GC/MS Y**	**08/11/11**	**08/12/11 22:34**	**110811L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	21	4.3	0.86	1		Tetrabutyltin	ND	4.3	0.51	1	
Monobutyltin	ND	4.3	1.4	1		Tributyltin	23	4.3	0.48	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	67	50-130	

Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**GC/MS Y**	**08/11/11**	**08/12/11 23:06**	**110811L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	17	4.3	0.86	1		Tetrabutyltin	ND	4.3	0.51	1	
Monobutyltin	ND	4.3	1.4	1		Tributyltin	27	4.3	0.48	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	93	50-130	

Method Blank	**099-07-016-862**	**N/A**	**Solid**	**GC/MS Y**	**08/11/11**	**08/12/11 15:32**	**110811L18**

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	0.60	1		Tetrabutyltin	ND	3.0	0.36	1	
Monobutyltin	ND	3.0	0.97	1		Tributyltin	ND	3.0	0.33	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	80	50-130	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: Port of Los Angeles - 1015101913			Page 1 of 2

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Top	**11-08-0758-1-A**	**06/07/11 13:35**	**Sediment**	**ICP/MS 04**	**08/11/11**	**08/12/11 13:54**	**110811L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	10.5	0.172	1		Nickel	25.0	0.172	1	
Cadmium	0.483	0.172	1		Selenium	0.548	0.172	1	
Chromium	41.7	0.172	1		Silver	0.233	0.172	1	
Copper	103	0.172	1		Zinc	130	1.72	1	
Lead	31.5	0.172	1						

Station 4-Top	**11-08-0758-2-A**	**06/07/11 15:00**	**Sediment**	**ICP/MS 04**	**08/11/11**	**08/12/11 13:59**	**110811L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	11.6	0.158	1		Nickel	26.1	0.158	1	
Cadmium	0.588	0.158	1		Selenium	0.638	0.158	1	
Chromium	47.7	0.158	1		Silver	0.309	0.158	1	
Copper	96.5	0.158	1		Zinc	148	1.58	1	
Lead	72.2	0.158	1						

Station 5-Top	**11-08-0758-3-A**	**06/07/11 16:00**	**Sediment**	**ICP/MS 04**	**08/11/11**	**08/12/11 14:04**	**110811L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	9.80	0.154	1		Nickel	21.0	0.154	1	
Cadmium	0.602	0.154	1		Selenium	0.436	0.154	1	
Chromium	46.0	0.154	1		Silver	0.280	0.154	1	
Copper	68.0	0.154	1		Zinc	126	1.54	1	
Lead	44.1	0.154	1						

Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**ICP/MS 04**	**08/11/11**	**08/12/11 14:20**	**110811L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	12.8	0.187	1		Nickel	29.4	0.187	1	
Cadmium	0.668	0.187	1		Selenium	0.658	0.187	1	
Chromium	49.1	0.187	1		Silver	0.285	0.187	1	
Copper	87.4	0.187	1		Zinc	147	1.87	1	
Lead	38.4	0.187	1						

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020
		Units:	mg/kg
Project: Port of Los Angeles - 1015101913			Page 2 of 2

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**ICP/MS 04**	**08/11/11**	**08/12/11 14:26**	**110811L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	21.6	0.143	1		Nickel	30.2	0.143	1	
Cadmium	1.24	0.143	1		Selenium	0.792	0.143	1	
Chromium	90.0	0.143	1		Silver	0.531	0.143	1	
Copper	141	0.143	1		Zinc	217	1.43	1	
Lead	120	0.143	1						

Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**ICP/MS 04**	**08/11/11**	**08/12/11 14:31**	**110811L08**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	11.7	0.143	1		Nickel	21.8	0.143	1	
Cadmium	0.953	0.143	1		Selenium	0.369	0.143	1	
Chromium	69.3	0.143	1		Silver	0.469	0.143	1	
Copper	81.0	0.143	1		Zinc	164	1.43	1	
Lead	83.8	0.143	1						

Method Blank	**096-10-002-2,040**	**N/A**	**Solid**	**ICP/MS 04**	**08/11/11**	**08/12/11 12:15**	**110811L08**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.100	1		Nickel	ND	0.100	1	
Cadmium	ND	0.100	1		Selenium	ND	0.100	1	
Chromium	ND	0.100	1		Silver	ND	0.100	1	
Copper	ND	0.100	1		Zinc	ND	1.00	1	
Lead	ND	0.100	1						

Return to Contents

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Station 3-Top	**11-08-0758-1-A**	**06/07/11 13:35**	**Sediment**	**Mercury**	**08/12/11**	**08/12/11 13:23**	**110812L02**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.182	0.0346	1		mg/kg

Station 4-Top	**11-08-0758-2-A**	**06/07/11 15:00**	**Sediment**	**Mercury**	**08/12/11**	**08/12/11 13:25**	**110812L02**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.245	0.0316	1		mg/kg

Station 5-Top	**11-08-0758-3-A**	**06/07/11 16:00**	**Sediment**	**Mercury**	**08/12/11**	**08/12/11 13:27**	**110812L02**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.239	0.0309	1		mg/kg

Station 3-Bottom	**11-08-0758-4-A**	**06/07/11 13:35**	**Sediment**	**Mercury**	**08/12/11**	**08/12/11 13:37**	**110812L02**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.227	0.0374	1		mg/kg

Station 4-Bottom	**11-08-0758-5-A**	**06/07/11 15:00**	**Sediment**	**Mercury**	**08/12/11**	**08/12/11 13:39**	**110812L02**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.755	0.0288	1		mg/kg

Station 5-Bottom	**11-08-0758-6-A**	**06/07/11 16:00**	**Sediment**	**Mercury**	**08/12/11**	**08/12/11 13:41**	**110812L02**

-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Units
Mercury	0.428	0.0287	1		mg/kg

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project: Port of Los Angeles - 1015101913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-452-219**	**N/A**	**Solid**	**Mercury**	**08/12/11**	**08/12/11 13:12**	**110812L02**

Parameter	Result	RL	DF	Qual	Units
Mercury	ND	0.0200	1		mg/kg

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

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	08/10/11
Work Order No:	11-08-0758
Preparation:	EPA 3050B
Method:	EPA 6020

Project Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-08-0860-1	**Sediment**	**ICP/MS 04**	**08/11/11**	**08/12/11**	**110811S08**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	113	118	80-120	4	0-20	
Cadmium	110	112	80-120	1	0-20	
Chromium	114	117	80-120	2	0-20	
Copper	113	110	80-120	1	0-20	
Lead	125	129	80-120	1	0-20	3
Nickel	103	105	80-120	1	0-20	
Selenium	95	104	80-120	9	0-20	
Silver	102	103	80-120	1	0-20	
Zinc	4X	4X	80-120	4X	0-20	Q

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

AMEC Environment & Infrastructure		Date Received	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PDSD Batch Number
11-08-0860-1	**Sediment**	**ICP/MS 04**	**08/11/11**	**08/12/11**	**110811S08**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	98	96	75-125	1	0-20	
Cadmium	97	95	75-125	2	0-20	
Chromium	94	90	75-125	2	0-20	
Copper	87	85	75-125	1	0-20	
Lead	107	96	75-125	3	0-20	
Nickel	87	85	75-125	2	0-20	
Selenium	92	90	75-125	3	0-20	
Silver	87	86	75-125	0	0-20	
Zinc	4X	4X	75-125	4X	0-20	Q,X

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
Station 5-Top	**Sediment**	**N/A**	**08/11/11**	**08/11/11**	**B0811TSD2**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Solids, Total	64.9	65.0	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	08/10/11
Work Order No:	11-08-0758
Preparation:	Extraction
Method:	EPA 413.2M

Project Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-08-0971-1	**Sediment**	**IR #1**	**08/15/11**	**08/15/11**	**110815S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oil and Grease	80	78	55-135	2	0-30	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 418.1M

Project Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
11-08-0971-1	**Sediment**	**IR #1**	**08/15/11**	**08/15/11**	**110815S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TRPH	82	86	55-135	4	0-30	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AMEC Environment & Infrastructure		Date Received:	08/10/11
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Station 3-Top	**Sediment**	**Mercury**	**08/12/11**	**08/12/11**	**110812S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	90	89	76-136	1	0-16	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	08/10/11
Work Order No:	11-08-0758
Preparation:	EPA 3545
Method:	Organotins by Krone et al.

Project Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Station 4-Top	**Sediment**	**GC/MS Y**	**08/11/11**	**08/12/11**	**110811S18**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	27	108	50-130	121	0-20	3,4
Tributyltin	23	82	50-130	73	0-20	3,4

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	08/10/11
Work Order No:	11-08-0758
Preparation:	EPA 3545
Method:	EPA 8081A

Project Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Station 5-Bottom	**Sediment**	**GC 51**	**08/11/11**	**08/15/11**	**110811S15A**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aldrin	64	57	50-135	13	0-25	
Alpha-BHC	71	64	50-135	10	0-25	
Beta-BHC	99	84	50-135	16	0-25	
Delta-BHC	74	64	50-135	15	0-25	
Gamma-BHC	62	55	50-135	12	0-25	
Dieldrin	83	74	50-135	12	0-25	
4,4'-DDD	89	74	50-135	10	0-25	
4,4'-DDE	142	89	50-135	10	0-25	3
4,4'-DDT	113	0	50-135	100	0-25	3,4
Endosulfan I	64	55	50-135	16	0-25	
Endosulfan II	76	63	50-135	20	0-25	
Endosulfan Sulfate	68	57	50-135	18	0-25	
Endrin	83	70	50-135	16	0-25	
Endrin Aldehyde	55	46	50-135	16	0-25	3
Endrin Ketone	98	83	50-135	16	0-25	
Heptachlor	71	62	50-135	14	0-25	
Heptachlor Epoxide	100	89	50-135	12	0-25	
Methoxychlor	20	19	50-135	8	0-25	3
Alpha Chlordane	73	62	50-135	16	0-25	
Gamma Chlordane	66	56	50-135	16	0-25	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	08/10/11
Work Order No:	11-08-0758
Preparation:	EPA 3545
Method:	EPA 8270C SIM PAHs

Project Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Station 5-Bottom	**Sediment**	**GC/MS BBB**	**08/11/11**	**08/15/11**	**110811S13**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Acenaphthene	108	98	40-160	10	0-20	
Acenaphthylene	160	134	40-160	13	0-20	
Anthracene	304	298	40-160	1	0-20	3
Benzo (a) Anthracene	393	300	40-160	7	0-20	3
Benzo (a) Pyrene	976	503	40-160	28	0-20	3,4
Benzo (b) Fluoranthene	1237	756	40-160	27	0-20	3,4
Benzo (g,h,i) Perylene	116	46	40-160	27	0-20	4
Benzo (k) Fluoranthene	988	333	40-160	44	0-20	3,4
Chrysene	519	571	40-160	3	0-20	3
Dibenz (a,h) Anthracene	88	69	40-160	11	0-20	
Fluoranthene	635	382	40-160	26	0-20	3,4
Fluorene	106	95	40-160	9	0-20	
Indeno (1,2,3-c,d) Pyrene	162	66	40-160	29	0-20	3,4
2-Methylnaphthalene	102	92	40-160	11	0-20	
1-Methylnaphthalene	98	91	40-160	7	0-20	
Naphthalene	103	84	40-160	18	0-20	
Phenanthrene	137	133	40-160	2	0-20	
Pyrene	1704	866	40-160	28	0-46	3

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	08/10/11
Work Order No:	11-08-0758
Preparation:	EPA 3545
Method:	EPA 8270C SIM PCB Congeners

Project Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Station 3-Top	**Sediment**	**GC/MS HHH**	**08/11/11**	**08/17/11**	**110811S17A**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
PCB008	106	115	50-125	8	0-30	
PCB018	100	106	50-125	6	0-30	
PCB028	110	120	50-125	9	0-30	
PCB044	106	118	50-125	11	0-30	
PCB052	104	117	50-125	11	0-30	
PCB066	114	123	50-125	8	0-30	
PCB077	111	119	50-125	6	0-30	
PCB101	109	117	50-125	7	0-30	
PCB105	116	122	50-125	5	0-30	
PCB118	117	125	50-125	6	0-30	
PCB126	108	112	50-125	4	0-30	
PCB128	112	115	50-125	3	0-30	
PCB153	109	116	50-125	6	0-30	
PCB170	98	100	50-125	3	0-30	
PCB180	112	115	50-125	3	0-30	
PCB187	110	114	50-125	3	0-30	
PCB195	119	121	50-125	1	0-30	
PCB206	105	104	50-125	1	0-30	
PCB209	114	110	50-125	3	0-30	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-10-002-2,040	**Solid**	**ICP/MS 04**	**08/11/11**	**08/12/11**	**110811L08**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	89	88	80-120	0	0-20	
Cadmium	93	93	80-120	0	0-20	
Chromium	88	88	80-120	0	0-20	
Copper	93	94	80-120	2	0-20	
Lead	96	97	80-120	2	0-20	
Nickel	88	87	80-120	1	0-20	
Selenium	95	94	80-120	1	0-20	
Silver	89	90	80-120	1	0-20	
Zinc	93	95	80-120	2	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 413.2M

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-019-97	**Solid**	**IR #1**	**08/15/11**	**08/15/11**	**110815L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Oil and Grease	110	99	70-130	11	0-30	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	Extraction
		Method:	EPA 418.1M

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-015-1,783	**Solid**	**IR #1**	**08/15/11**	**08/15/11**	**110815L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TRPH	103	97	70-130	5	0-30	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-452-219	**Solid**	**Mercury**	**08/12/11**	**08/12/11**	**110812L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	102	100	82-124	1	0-16	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-016-862	**Solid**	**GC/MS Y**	**08/11/11**	**08/12/11**	**110811L18**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	106	113	50-130	6	0-20	
Tributyltin	82	82	50-130	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-858-106	**Solid**	**GC 51**	**08/11/11**	**08/15/11**	**110811L15A**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Aldrin	77	78	50-135	36-149	2	0-25	
Alpha-BHC	86	88	50-135	36-149	2	0-25	
Beta-BHC	108	110	50-135	36-149	1	0-25	
Delta-BHC	81	84	50-135	36-149	4	0-25	
Gamma-BHC	92	94	50-135	36-149	2	0-25	
Dieldrin	86	89	50-135	36-149	3	0-25	
4,4'-DDD	94	99	50-135	36-149	5	0-25	
4,4'-DDE	102	107	50-135	36-149	4	0-25	
4,4'-DDT	96	102	50-135	36-149	6	0-25	
Endosulfan I	79	81	50-135	36-149	3	0-25	
Endosulfan II	83	86	50-135	36-149	4	0-25	
Endosulfan Sulfate	82	86	50-135	36-149	5	0-25	
Endrin	88	93	50-135	36-149	6	0-25	
Endrin Aldehyde	63	63	50-135	36-149	1	0-25	
Endrin Ketone	98	103	50-135	36-149	5	0-25	
Heptachlor	88	91	50-135	36-149	3	0-25	
Heptachlor Epoxide	66	68	50-135	36-149	3	0-25	
Methoxychlor	91	96	50-135	36-149	5	0-25	
Alpha Chlordane	88	91	50-135	36-149	3	0-25	
Gamma Chlordane	82	85	50-135	36-149	3	0-25	

Total number of LCS compounds : 20
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-08-0758
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PAHs

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-097-56	**Solid**	**GC/MS BBB**	**08/11/11**	**08/15/11**	**110811L13**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Acenaphthene	94	96	48-108	38-118	2	0-11	
Acenaphthylene	91	92	40-160	20-180	1	0-20	
Anthracene	73	73	40-160	20-180	0	0-20	
Benzo (a) Anthracene	85	85	40-160	20-180	0	0-20	
Benzo (a) Pyrene	91	90	40-160	20-180	1	0-20	
Benzo (b) Fluoranthene	94	93	40-160	20-180	1	0-20	
Benzo (g,h,i) Perylene	72	72	40-160	20-180	1	0-20	
Benzo (k) Fluoranthene	92	93	40-160	20-180	1	0-20	
Chrysene	88	88	40-160	20-180	0	0-20	
Dibenz (a,h) Anthracene	72	70	40-160	20-180	2	0-20	
Fluoranthene	88	88	40-160	20-180	1	0-20	
Fluorene	95	96	40-160	20-180	2	0-20	
Indeno (1,2,3-c,d) Pyrene	75	75	40-160	20-180	1	0-20	
2-Methylnaphthalene	88	86	40-160	20-180	1	0-20	
1-Methylnaphthalene	98	99	40-160	20-180	1	0-20	
Naphthalene	98	98	40-160	20-180	0	0-20	
Phenanthrene	89	89	40-160	20-180	0	0-20	
Pyrene	89	88	40-160	20-180	0	0-16	

Total number of LCS compounds : 18

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 11-08-0758
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: Port of Los Angeles - 1015101913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-417-3	**Solid**	**GC/MS HHH**	**08/11/11**	**08/15/11**	**110811L17**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
PCB008	114	115	50-125	38-138	1	0-30	
PCB018	105	107	50-125	38-138	2	0-30	
PCB028	109	110	50-125	38-138	1	0-30	
PCB044	106	108	50-125	38-138	2	0-30	
PCB052	101	103	50-125	38-138	3	0-30	
PCB066	109	110	50-125	38-138	1	0-30	
PCB077	108	108	50-125	38-138	0	0-30	
PCB101	107	108	50-125	38-138	1	0-30	
PCB105	103	105	50-125	38-138	1	0-30	
PCB118	107	108	50-125	38-138	2	0-30	
PCB126	97	98	50-125	38-138	1	0-30	
PCB128	103	105	50-125	38-138	1	0-30	
PCB153	102	104	50-125	38-138	2	0-30	
PCB170	102	102	50-125	38-138	1	0-30	
PCB180	102	102	50-125	38-138	0	0-30	
PCB187	101	102	50-125	38-138	0	0-30	
PCB195	125	124	50-125	38-138	1	0-30	
PCB206	109	109	50-125	38-138	0	0-30	
PCB209	117	122	50-125	38-138	4	0-30	

Total number of LCS compounds : 19
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-08-0758

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
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 (MS) or Matrix Spike Duplicate (MSD) 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 or PES/PESD 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 without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

DATE: 08/09/11

PAGE: 1 OF 1

LABORATORY CLIENT: AMEC Earth & Infrastructure

ADDRESS: 9210 Sky Park Ct. # 200

CITY: San Diego, CA 92123

TEL: 858-354-8340 | FAX: 858-300-4301 | E-MAIL: barry.snyder@amec.com

CLIENT PROJECT NAME / NUMBER: Port of Los Angeles - 1015101913

PROJECT CONTACT: Barry Snyder

SAMPLER(S): (SIGNATURE)

P.O. NO.:

QUOTE NO.:

LAB USE ONLY: 11-08-0758

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS:
5-Day turnaround time. Contact Barry Snyder with questions (858-354-8340)
Report results in dry-weight. Return any remaining sample volume to AMEC
Test PAHs on 'bottom' samples only.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Oil & Grease (EPA 413.2M)	TRPH (418.1)	DDTs (8081A)	TBT-Organotins	PCBs Congeners (8270C)	PAHs (8270C)	Metals (6020/7471A)	Percent Solids (%)
1	Station 3 - Top	POLA 167-169	06/07/11	1335	Sed	1	X	X	X	X	X		X	X
2	Station 4 - Top	POLA 167-169	06/07/11	1500	Sed	1	X	X	X	X	X		X	X
3	Station 5 - Top	POLA 167-169	06/07/11	1600	Sed	1	X	X	X	X	X		X	X
4	Station 3 - Bottom	POLA 167-169	06/07/11	1335	Sed	1	X	X	X	X	X	X	X	X
5	Station 4 - Bottom	POLA 167-169	06/07/11	1500	Sed	1	X	X	X	X	X	X	X	X
6	Station 5 - Bottom	POLA 167-169	06/07/11	1600	Sed	1	X	X	X	X	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Kimberley Gobasi	CEL	08/10/11	1325
	CEL	08/10/11	1715

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-08-0758

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 08/10/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.9 °C + 0.5 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: VG

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: VG

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: RM

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☑8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** RM

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** WSC

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** WSC

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APPENDIX C2

ANALYTICAL CHEMISTRY REPORTS
SUPPLEMENTAL EVENT

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Calscience
Environmental & Marine Chemistry Laboratories

CALSCIENCE

WORK ORDER NUMBER: 11-09-1614

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: AMEC Environment & Infrastructure

Client Project Name: 101510913

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

Approved for release on 10/6/2011 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, 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. Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

Calscience
Environmental & Marine Chemistry Laboratories

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Work Order Number: 11-09-1614

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Calscience Environmental Laboratories, Inc.

CASE NARRATIVE

Calscience Work Order No.: 11-09-1614
Project Name: 101510913

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the sediment samples.

Sample Condition on Receipt

Six sediment samples (housed in 16-oz glass containers) were received for this project on September 23, 2011. The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures. The temperature of the samples upon receipt at the laboratory was 3.6°C. All samples were given laboratory identification numbers, logged into the Laboratory Information Management System (LIMS) and then stored under refrigeration pending sediment chemistry testing.

Tests Performed

Trace Metals by EPA 6020/7471A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs, Phenols and Phthalates by EPA 8270C SIM
Organotins by Krone et al.
Total Solids by SM 2540B

Data Summary

The sample results and reporting limits were dry weight corrected.

All samples were homogenized prior to preparation and analysis.

Holding times

All holding times were met.

Calibration

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

Reporting Limits

All Method Detection Limits were met. The Organotins results were evaluated to the MDL, and where applicable, “J” flags were reported.

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Blanks

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

Laboratory Control Samples

A Laboratory Control Sample (LCS) analysis was performed at the required frequencies, and unless otherwise noted, all parameters were within the established control limits.

Matrix Spikes

Matrix spike analyses were performed for each applicable analysis on AMEC project sample A1. All parameters were within the established control limits with the following exceptions.

The Arsenic and Lead matrix spike and/or matrix spike duplicate recoveries (by EPA 6020) were above the established control limits. However, since the Arsenic and Lead PDS/PDSD and LCS/LCSD recoveries were in control, the data are released with no further action.

The MS and MSD recoveries for Tributyltin and Tetrabutyltin were outside the established control limits. However, the results have been flagged with the appropriate qualifiers and are released with no further action since the associated LCS/LCSD recoveries were in control.

The MS, MSD and/or RPD values for two of the Chlorinated Pesticides (by EPA 8081A) fell outside their established control limits due to matrix interference. Yet, since the LCS, LCSD and RPDs were within the control limits, the results are released with no further qualification.

Surrogates

Surrogate recoveries for all applicable tests and samples were within the established control limits with the following exceptions.

Laboratory Duplicate

A laboratory duplicate was created for this project using Sample A2. The Laboratory Duplicate was analyzed for the requested analyses and the precision between the two samples was acceptable.

Acronyms

LCS/LCSD- Laboratory Control Sample/Laboratory Control Sample Duplicate
PDS/PDSD- Post Digestion Spike/Post Digestion Spike Duplicate
MS/MSD- Matrix Spike/Matrix Spike Duplicate

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ME-Marginal Exceedance
RPD- Relative Percent Difference

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: 101510913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A1	**11-09-1614-1-A**	**09/23/11 12:00**	**Sediment**	**N/A**	**09/26/11**	**09/26/11 16:00**	**B0926TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	79.8	0.100	1		%

A2	**11-09-1614-2-A**	**09/23/11 12:00**	**Sediment**	**N/A**	**09/26/11**	**09/26/11 16:00**	**B0926TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	81.1	0.100	1		%

A3	**11-09-1614-3-A**	**09/23/11 12:00**	**Sediment**	**N/A**	**09/26/11**	**09/26/11 16:00**	**B0926TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	76.1	0.100	1		%

B1	**11-09-1614-4-A**	**09/22/11 16:00**	**Sediment**	**N/A**	**09/26/11**	**09/26/11 16:00**	**B0926TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	72.1	0.100	1		%

B2	**11-09-1614-5-A**	**09/22/11 16:00**	**Sediment**	**N/A**	**09/26/11**	**09/26/11 16:00**	**B0926TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	75.7	0.100	1		%

B3	**11-09-1614-6-A**	**09/22/11 16:00**	**Sediment**	**N/A**	**09/26/11**	**09/26/11 16:00**	**B0926TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	77.7	0.100	1		%

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: 101510913

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A2 (LAB DUP)	**11-09-1614-7-A**	**09/23/11 12:00**	**Sediment**	**N/A**	**09/26/11**	**09/26/11 16:00**	**B0926TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	81.1	0.100	1		%

Method Blank	**099-05-019-1,741**	**N/A**	**Solid**	**N/A**	**09/26/11**	**09/26/11 16:00**	**B0926TSB1**

Parameter	Result	RL	DF	Qual	Units
Solids, Total	ND	0.100	1		%

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: 101510913			Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A1	**11-09-1614-1-A**	**09/23/11 12:00**	**Sediment**	**GC 51**	**09/27/11**	**09/28/11 19:59**	**110927L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.3	1		Endosulfan II	ND	1.3	1	
Alpha-BHC	ND	1.3	1		Endosulfan Sulfate	ND	1.3	1	
Beta-BHC	ND	1.3	1		Endrin	ND	1.3	1	
Delta-BHC	ND	1.3	1		Endrin Aldehyde	ND	1.3	1	
Gamma-BHC	ND	1.3	1		Endrin Ketone	ND	1.3	1	
Chlordane	ND	13	1		Heptachlor	ND	1.3	1	
Dieldrin	ND	1.3	1		Heptachlor Epoxide	ND	1.3	1	
Trans-nonachlor	ND	1.3	1		Methoxychlor	ND	1.3	1	
2,4'-DDD	ND	1.3	1		Toxaphene	ND	25	1	
2,4'-DDE	ND	1.3	1		Alpha Chlordane	ND	1.3	1	
2,4'-DDT	ND	1.3	1		Oxychlordane	ND	1.3	1	
4,4'-DDD	ND	1.3	1		Gamma Chlordane	ND	1.3	1	
4,4'-DDE	ND	1.3	1		Cis-nonachlor	ND	1.3	1	
4,4'-DDT	1.4	1.3	1		Total DDTs	1.4	1.3	1	
Endosulfan I	ND	1.3	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	59	50-130		Decachlorobiphenyl	52	50-130	

A2	**11-09-1614-2-A**	**09/23/11 12:00**	**Sediment**	**GC 51**	**09/27/11**	**09/28/11 20:13**	**110927L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.2	1		Endosulfan II	ND	1.2	1	
Alpha-BHC	ND	1.2	1		Endosulfan Sulfate	ND	1.2	1	
Beta-BHC	ND	1.2	1		Endrin	ND	1.2	1	
Delta-BHC	ND	1.2	1		Endrin Aldehyde	ND	1.2	1	
Gamma-BHC	ND	1.2	1		Endrin Ketone	ND	1.2	1	
Chlordane	ND	12	1		Heptachlor	ND	1.2	1	
Dieldrin	ND	1.2	1		Heptachlor Epoxide	ND	1.2	1	
Trans-nonachlor	ND	1.2	1		Methoxychlor	ND	1.2	1	
2,4'-DDD	ND	1.2	1		Toxaphene	ND	25	1	
2,4'-DDE	ND	1.2	1		Alpha Chlordane	ND	1.2	1	
2,4'-DDT	ND	1.2	1		Oxychlordane	ND	1.2	1	
4,4'-DDD	ND	1.2	1		Gamma Chlordane	ND	1.2	1	
4,4'-DDE	ND	1.2	1		Cis-nonachlor	ND	1.2	1	
4,4'-DDT	ND	1.2	1		Total DDTs	ND	1.2	1	
Endosulfan I	ND	1.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	83	50-130		Decachlorobiphenyl	71	50-130	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: 101510913			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A3	**11-09-1614-3-A**	**09/23/11 12:00**	**Sediment**	**GC 51**	**09/27/11**	**09/28/11 20:28**	**110927L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.3	1		Endosulfan II	ND	1.3	1	
Alpha-BHC	ND	1.3	1		Endosulfan Sulfate	ND	1.3	1	
Beta-BHC	ND	1.3	1		Endrin	ND	1.3	1	
Delta-BHC	ND	1.3	1		Endrin Aldehyde	ND	1.3	1	
Gamma-BHC	ND	1.3	1		Endrin Ketone	ND	1.3	1	
Chlordane	ND	13	1		Heptachlor	ND	1.3	1	
Dieldrin	ND	1.3	1		Heptachlor Epoxide	ND	1.3	1	
Trans-nonachlor	ND	1.3	1		Methoxychlor	ND	1.3	1	
2,4'-DDD	ND	1.3	1		Toxaphene	ND	26	1	
2,4'-DDE	ND	1.3	1		Alpha Chlordane	ND	1.3	1	
2,4'-DDT	ND	1.3	1		Gamma Chlordane	ND	1.3	1	
4,4'-DDD	ND	1.3	1		Oxychlordane	ND	1.3	1	
4,4'-DDE	ND	1.3	1		Cis-nonachlor	ND	1.3	1	
4,4'-DDT	ND	1.3	1		Total DDTs	ND	1.3	1	
Endosulfan I	ND	1.3	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	91	50-130		Decachlorobiphenyl	72	50-130	

B1	**11-09-1614-4-A**	**09/22/11 16:00**	**Sediment**	**GC 51**	**09/27/11**	**09/29/11 15:02**	**110927L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.4	1		Endosulfan II	ND	1.4	1	
Alpha-BHC	ND	1.4	1		Endosulfan Sulfate	ND	1.4	1	
Beta-BHC	ND	1.4	1		Endrin	ND	1.4	1	
Delta-BHC	ND	1.4	1		Endrin Aldehyde	ND	1.4	1	
Gamma-BHC	ND	1.4	1		Endrin Ketone	ND	1.4	1	
Chlordane	ND	14	1		Heptachlor	ND	1.4	1	
Dieldrin	ND	1.4	1		Heptachlor Epoxide	ND	1.4	1	
Trans-nonachlor	ND	1.4	1		Methoxychlor	ND	1.4	1	
2,4'-DDD	ND	1.4	1		Toxaphene	ND	28	1	
2,4'-DDE	2.6	1.4	1		Alpha Chlordane	ND	1.4	1	
2,4'-DDT	ND	1.4	1		Gamma Chlordane	ND	1.4	1	
4,4'-DDD	ND	1.4	1		Oxychlordane	ND	1.4	1	
4,4'-DDE	4.2	1.4	1		Cis-nonachlor	ND	1.4	1	
4,4'-DDT	ND	1.4	1		Total DDTs	6.9	1.4	1	
Endosulfan I	ND	1.4	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	54	50-130		Decachlorobiphenyl	88	50-130	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: 101510913			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B2	**11-09-1614-5-A**	**09/22/11 16:00**	**Sediment**	**GC 51**	**09/27/11**	**09/28/11 20:56**	**110927L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.3	1		Endosulfan II	ND	1.3	1	
Alpha-BHC	ND	1.3	1		Endosulfan Sulfate	ND	1.3	1	
Beta-BHC	ND	1.3	1		Endrin	ND	1.3	1	
Delta-BHC	ND	1.3	1		Endrin Aldehyde	ND	1.3	1	
Gamma-BHC	ND	1.3	1		Endrin Ketone	ND	1.3	1	
Chlordane	ND	13	1		Heptachlor	ND	1.3	1	
Dieldrin	ND	1.3	1		Heptachlor Epoxide	ND	1.3	1	
Trans-nonachlor	ND	1.3	1		Methoxychlor	ND	1.3	1	
2,4'-DDD	ND	1.3	1		Toxaphene	ND	26	1	
2,4'-DDE	ND	1.3	1		Alpha Chlordane	ND	1.3	1	
2,4'-DDT	ND	1.3	1		Gamma Chlordane	ND	1.3	1	
4,4'-DDD	ND	1.3	1		Oxychlordane	ND	1.3	1	
4,4'-DDE	ND	1.3	1		Cis-nonachlor	ND	1.3	1	
4,4'-DDT	ND	1.3	1		Total DDTs	ND	1.3	1	
Endosulfan I	ND	1.3	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	60	50-130		Decachlorobiphenyl	66	50-130	

B3	**11-09-1614-6-A**	**09/22/11 16:00**	**Sediment**	**GC 51**	**09/27/11**	**09/28/11 21:11**	**110927L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.3	1		Endosulfan II	ND	1.3	1	
Alpha-BHC	ND	1.3	1		Endosulfan Sulfate	ND	1.3	1	
Beta-BHC	ND	1.3	1		Endrin	ND	1.3	1	
Delta-BHC	ND	1.3	1		Endrin Aldehyde	ND	1.3	1	
Gamma-BHC	ND	1.3	1		Endrin Ketone	ND	1.3	1	
Chlordane	ND	13	1		Heptachlor	ND	1.3	1	
Dieldrin	ND	1.3	1		Heptachlor Epoxide	ND	1.3	1	
Trans-nonachlor	ND	1.3	1		Methoxychlor	ND	1.3	1	
2,4'-DDD	ND	1.3	1		Toxaphene	ND	26	1	
2,4'-DDE	ND	1.3	1		Alpha Chlordane	ND	1.3	1	
2,4'-DDT	ND	1.3	1		Gamma Chlordane	ND	1.3	1	
4,4'-DDD	ND	1.3	1		Oxychlordane	ND	1.3	1	
4,4'-DDE	ND	1.3	1		Cis-nonachlor	ND	1.3	1	
4,4'-DDT	ND	1.3	1		Total DDTs	ND	1.3	1	
Endosulfan I	ND	1.3	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	94	50-130		Decachlorobiphenyl	78	50-130	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A
		Units:	ug/kg
Project: 101510913			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A2 (LAB DUP)	**11-09-1614-7-A**	**09/23/11 12:00**	**Sediment**	**GC 51**	**09/27/11**	**09/28/11 21:25**	**110927L06**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.2	1		Endosulfan II	ND	1.2	1	
Alpha-BHC	ND	1.2	1		Endosulfan Sulfate	ND	1.2	1	
Beta-BHC	ND	1.2	1		Endrin	ND	1.2	1	
Delta-BHC	ND	1.2	1		Endrin Aldehyde	ND	1.2	1	
Gamma-BHC	ND	1.2	1		Endrin Ketone	ND	1.2	1	
Chlordane	ND	12	1		Heptachlor	ND	1.2	1	
Dieldrin	ND	1.2	1		Heptachlor Epoxide	ND	1.2	1	
Trans-nonachlor	ND	1.2	1		Methoxychlor	ND	1.2	1	
2,4'-DDD	ND	1.2	1		Toxaphene	ND	25	1	
2,4'-DDE	ND	1.2	1		Alpha Chlordane	ND	1.2	1	
2,4'-DDT	ND	1.2	1		Oxychlordane	ND	1.2	1	
4,4'-DDD	ND	1.2	1		Gamma Chlordane	ND	1.2	1	
4,4'-DDE	ND	1.2	1		Cis-nonachlor	ND	1.2	1	
4,4'-DDT	ND	1.2	1		Total DDTs	ND	1.2	1	
Endosulfan I	ND	1.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	77	50-130		Decachlorobiphenyl	50	50-130	

Method Blank	**099-12-858-113**	**N/A**	**Solid**	**GC 51**	**09/27/11**	**09/28/11 17:34**	**110927L06**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aldrin	ND	1.0	1		Endosulfan II	ND	1.0	1	
Alpha-BHC	ND	1.0	1		Endosulfan Sulfate	ND	1.0	1	
Beta-BHC	ND	1.0	1		Endrin	ND	1.0	1	
Delta-BHC	ND	1.0	1		Endrin Aldehyde	ND	1.0	1	
Gamma-BHC	ND	1.0	1		Endrin Ketone	ND	1.0	1	
Chlordane	ND	10	1		Heptachlor	ND	1.0	1	
Dieldrin	ND	1.0	1		Heptachlor Epoxide	ND	1.0	1	
Trans-nonachlor	ND	1.0	1		Methoxychlor	ND	1.0	1	
2,4'-DDD	ND	1.0	1		Toxaphene	ND	20	1	
2,4'-DDE	ND	1.0	1		Alpha Chlordane	ND	1.0	1	
2,4'-DDT	ND	1.0	1		Oxychlordane	ND	1.0	1	
4,4'-DDD	ND	1.0	1		Gamma Chlordane	ND	1.0	1	
4,4'-DDE	ND	1.0	1		Cis-nonachlor	ND	1.0	1	
4,4'-DDT	ND	1.0	1		Total DDTs	ND	1.0	1	
Endosulfan I	ND	1.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,5,6-Tetrachloro-m-Xylene	88	50-130		Decachlorobiphenyl	73	50-130	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg
Project: 101510913			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A1	**11-09-1614-1-A**	**09/23/11 12:00**	**Sediment**	**GC/MS MM**	**09/27/11**	**09/28/11 17:40**	**110927L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Isophorone	ND	13	1		Benzo (b) Fluoranthene	ND	13	1	
1-Methylnaphthalene	ND	13	1		Benzo (g,h,i) Perylene	ND	13	1	
2,4,5-Trichlorophenol	ND	13	1		Benzo (k) Fluoranthene	15	13	1	
2,4,6-Trichlorophenol	ND	13	1		Bis(2-Ethylhexyl) Phthalate	ND	13	1	
2,4-Dichlorophenol	ND	13	1		Butyl Benzyl Phthalate	ND	13	1	
2,4-Dimethylphenol	ND	13	1		Chrysene	ND	13	1	
2,4-Dinitrophenol	ND	630	1		Di-n-Butyl Phthalate	ND	13	1	
2-Chlorophenol	ND	13	1		Di-n-Octyl Phthalate	ND	13	1	
2-Methylnaphthalene	ND	13	1		Dibenz (a,h) Anthracene	ND	13	1	
2-Methylphenol	ND	13	1		Diethyl Phthalate	ND	13	1	
2-Nitrophenol	ND	13	1		Dimethyl Phthalate	ND	13	1	
3/4-Methylphenol	ND	13	1		Fluoranthene	ND	13	1	
4,6-Dinitro-2-Methylphenol	ND	630	1		Fluorene	ND	13	1	
4-Chloro-3-Methylphenol	ND	13	1		Indeno (1,2,3-c,d) Pyrene	ND	13	1	
4-Nitrophenol	ND	630	1		Naphthalene	ND	13	1	
Acenaphthene	ND	13	1		Pentachlorophenol	ND	630	1	
Acenaphthylene	ND	13	1		Phenanthrene	ND	13	1	
Anthracene	ND	13	1		Phenol	ND	13	1	
Benzo (a) Anthracene	ND	13	1		Pyrene	27	13	1	
Benzo (a) Pyrene	31	13	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	79	32-143		2-Fluorobiphenyl	49	14-146	
2-Fluorophenol	61	15-138		Nitrobenzene-d5	43	18-162	
p-Terphenyl-d14	74	34-148		Phenol-d6	70	17-141	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg
Project: 101510913			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A2	**11-09-1614-2-A**	**09/23/11 12:00**	**Sediment**	**GC/MS MM**	**09/27/11**	**09/28/11 18:57**	**110927L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Isophorone	ND	12	1		Benzo (b) Fluoranthene	ND	12	1	
1-Methylnaphthalene	ND	12	1		Benzo (g,h,i) Perylene	ND	12	1	
2,4,5-Trichlorophenol	ND	12	1		Benzo (k) Fluoranthene	ND	12	1	
2,4,6-Trichlorophenol	ND	12	1		Bis(2-Ethylhexyl) Phthalate	ND	12	1	
2,4-Dichlorophenol	ND	12	1		Butyl Benzyl Phthalate	ND	12	1	
2,4-Dimethylphenol	ND	12	1		Chrysene	ND	12	1	
2,4-Dinitrophenol	ND	620	1		Di-n-Butyl Phthalate	ND	12	1	
2-Chlorophenol	ND	12	1		Di-n-Octyl Phthalate	ND	12	1	
2-Methylnaphthalene	ND	12	1		Dibenz (a,h) Anthracene	ND	12	1	
2-Methylphenol	ND	12	1		Diethyl Phthalate	ND	12	1	
2-Nitrophenol	ND	12	1		Dimethyl Phthalate	ND	12	1	
3/4-Methylphenol	ND	12	1		Fluoranthene	ND	12	1	
4,6-Dinitro-2-Methylphenol	ND	620	1		Fluorene	ND	12	1	
4-Chloro-3-Methylphenol	ND	12	1		Indeno (1,2,3-c,d) Pyrene	ND	12	1	
4-Nitrophenol	ND	620	1		Naphthalene	ND	12	1	
Acenaphthene	ND	12	1		Pentachlorophenol	ND	620	1	
Acenaphthylene	ND	12	1		Phenanthrene	ND	12	1	
Anthracene	ND	12	1		Phenol	ND	12	1	
Benzo (a) Anthracene	ND	12	1		Pyrene	ND	12	1	
Benzo (a) Pyrene	ND	12	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	78	32-143		2-Fluorobiphenyl	54	14-146	
2-Fluorophenol	59	15-138		Nitrobenzene-d5	48	18-162	
p-Terphenyl-d14	70	34-148		Phenol-d6	68	17-141	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg
Project: 101510913			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A3	**11-09-1614-3-A**	**09/23/11 12:00**	**Sediment**	**GC/MS MM**	**09/27/11**	**09/28/11 19:23**	**110927L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Isophorone	ND	13	1		Benzo (b) Fluoranthene	ND	13	1	
1-Methylnaphthalene	ND	13	1		Benzo (g,h,i) Perylene	ND	13	1	
2,4,5-Trichlorophenol	ND	13	1		Benzo (k) Fluoranthene	ND	13	1	
2,4,6-Trichlorophenol	ND	13	1		Bis(2-Ethylhexyl) Phthalate	ND	13	1	
2,4-Dichlorophenol	ND	13	1		Butyl Benzyl Phthalate	ND	13	1	
2,4-Dimethylphenol	ND	13	1		Chrysene	ND	13	1	
2,4-Dinitrophenol	ND	660	1		Di-n-Butyl Phthalate	ND	13	1	
2-Chlorophenol	ND	13	1		Di-n-Octyl Phthalate	ND	13	1	
2-Methylnaphthalene	ND	13	1		Dibenz (a,h) Anthracene	ND	13	1	
2-Methylphenol	ND	13	1		Diethyl Phthalate	ND	13	1	
2-Nitrophenol	ND	13	1		Dimethyl Phthalate	ND	13	1	
3/4-Methylphenol	ND	13	1		Fluoranthene	ND	13	1	
4,6-Dinitro-2-Methylphenol	ND	660	1		Fluorene	ND	13	1	
4-Chloro-3-Methylphenol	ND	13	1		Indeno (1,2,3-c,d) Pyrene	ND	13	1	
4-Nitrophenol	ND	660	1		Naphthalene	ND	13	1	
Acenaphthene	ND	13	1		Pentachlorophenol	ND	660	1	
Acenaphthylene	ND	13	1		Phenanthrene	ND	13	1	
Anthracene	ND	13	1		Phenol	ND	13	1	
Benzo (a) Anthracene	ND	13	1		Pyrene	ND	13	1	
Benzo (a) Pyrene	ND	13	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	71	32-143		2-Fluorobiphenyl	61	14-146	
2-Fluorophenol	60	15-138		Nitrobenzene-d5	52	18-162	
p-Terphenyl-d14	67	34-148		Phenol-d6	63	17-141	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg
Project: 101510913			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B1	**11-09-1614-4-A**	**09/22/11 16:00**	**Sediment**	**GC/MS MM**	**09/27/11**	**09/28/11 21:06**	**110927L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Isophorone	ND	14	1		Benzo (b) Fluoranthene	880	14	1	
1-Methylnaphthalene	ND	14	1		Benzo (g,h,i) Perylene	190	14	1	
2,4,5-Trichlorophenol	ND	14	1		Benzo (k) Fluoranthene	710	14	1	
2,4,6-Trichlorophenol	ND	14	1		Bis(2-Ethylhexyl) Phthalate	43	14	1	
2,4-Dichlorophenol	ND	14	1		Butyl Benzyl Phthalate	ND	14	1	
2,4-Dimethylphenol	ND	14	1		Chrysene	1600	14	1	
2,4-Dinitrophenol	ND	690	1		Di-n-Butyl Phthalate	ND	14	1	
2-Chlorophenol	ND	14	1		Di-n-Octyl Phthalate	ND	14	1	
2-Methylnaphthalene	ND	14	1		Dibenz (a,h) Anthracene	47	14	1	
2-Methylphenol	ND	14	1		Diethyl Phthalate	ND	14	1	
2-Nitrophenol	ND	14	1		Dimethyl Phthalate	ND	14	1	
3/4-Methylphenol	ND	14	1		Fluoranthene	2800	14	1	
4,6-Dinitro-2-Methylphenol	ND	690	1		Fluorene	46	14	1	
4-Chloro-3-Methylphenol	ND	14	1		Indeno (1,2,3-c,d) Pyrene	280	14	1	
4-Nitrophenol	ND	690	1		Naphthalene	ND	14	1	
Acenaphthene	33	14	1		Pentachlorophenol	ND	690	1	
Acenaphthylene	83	14	1		Phenanthrene	210	14	1	
Anthracene	920	14	1		Phenol	ND	14	1	
Benzo (a) Anthracene	1100	14	1		Pyrene	2800	14	1	
Benzo (a) Pyrene	810	14	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	76	32-143		2-Fluorobiphenyl	52	14-146	
2-Fluorophenol	51	15-138		Nitrobenzene-d5	44	18-162	
p-Terphenyl-d14	73	34-148		Phenol-d6	62	17-141	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg
Project: 101510913			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B2	**11-09-1614-5-A**	**09/22/11 16:00**	**Sediment**	**GC/MS MM**	**09/27/11**	**09/28/11 20:40**	**110927L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Isophorone	ND	13	1		Benzo (b) Fluoranthene	190	13	1	
1-Methylnaphthalene	ND	13	1		Benzo (g,h,i) Perylene	44	13	1	
2,4,5-Trichlorophenol	ND	13	1		Benzo (k) Fluoranthene	170	13	1	
2,4,6-Trichlorophenol	ND	13	1		Bis(2-Ethylhexyl) Phthalate	16	13	1	
2,4-Dichlorophenol	ND	13	1		Butyl Benzyl Phthalate	ND	13	1	
2,4-Dimethylphenol	ND	13	1		Chrysene	280	13	1	
2,4-Dinitrophenol	ND	660	1		Di-n-Butyl Phthalate	ND	13	1	
2-Chlorophenol	ND	13	1		Di-n-Octyl Phthalate	ND	13	1	
2-Methylnaphthalene	ND	13	1		Dibenz (a,h) Anthracene	ND	13	1	
2-Methylphenol	ND	13	1		Diethyl Phthalate	ND	13	1	
2-Nitrophenol	ND	13	1		Dimethyl Phthalate	ND	13	1	
3/4-Methylphenol	ND	13	1		Fluoranthene	550	13	1	
4,6-Dinitro-2-Methylphenol	ND	660	1		Fluorene	16	13	1	
4-Chloro-3-Methylphenol	ND	13	1		Indeno (1,2,3-c,d) Pyrene	60	13	1	
4-Nitrophenol	ND	660	1		Naphthalene	ND	13	1	
Acenaphthene	ND	13	1		Pentachlorophenol	ND	660	1	
Acenaphthylene	14	13	1		Phenanthrene	42	13	1	
Anthracene	96	13	1		Phenol	ND	13	1	
Benzo (a) Anthracene	160	13	1		Pyrene	710	13	1	
Benzo (a) Pyrene	170	13	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	89	32-143		2-Fluorobiphenyl	55	14-146	
2-Fluorophenol	68	15-138		Nitrobenzene-d5	51	18-162	
p-Terphenyl-d14	78	34-148		Phenol-d6	77	17-141	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg
Project: 101510913			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B3	**11-09-1614-6-A**	**09/22/11 16:00**	**Sediment**	**GC/MS MM**	**09/27/11**	**09/28/11 19:49**	**110927L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Isophorone	ND	13	1		Benzo (b) Fluoranthene	28	13	1	
1-Methylnaphthalene	ND	13	1		Benzo (g,h,i) Perylene	26	13	1	
2,4,5-Trichlorophenol	ND	13	1		Benzo (k) Fluoranthene	28	13	1	
2,4,6-Trichlorophenol	ND	13	1		Bis(2-Ethylhexyl) Phthalate	ND	13	1	
2,4-Dichlorophenol	ND	13	1		Butyl Benzyl Phthalate	ND	13	1	
2,4-Dimethylphenol	ND	13	1		Chrysene	39	13	1	
2,4-Dinitrophenol	ND	640	1		Di-n-Butyl Phthalate	ND	13	1	
2-Chlorophenol	ND	13	1		Di-n-Octyl Phthalate	ND	13	1	
2-Methylnaphthalene	ND	13	1		Dibenz (a,h) Anthracene	ND	13	1	
2-Methylphenol	ND	13	1		Diethyl Phthalate	ND	13	1	
2-Nitrophenol	ND	13	1		Dimethyl Phthalate	ND	13	1	
3/4-Methylphenol	ND	13	1		Fluoranthene	140	13	1	
4,6-Dinitro-2-Methylphenol	ND	640	1		Fluorene	ND	13	1	
4-Chloro-3-Methylphenol	ND	13	1		Indeno (1,2,3-c,d) Pyrene	25	13	1	
4-Nitrophenol	ND	640	1		Naphthalene	ND	13	1	
Acenaphthene	ND	13	1		Pentachlorophenol	ND	640	1	
Acenaphthylene	ND	13	1		Phenanthrene	ND	13	1	
Anthracene	15	13	1		Phenol	ND	13	1	
Benzo (a) Anthracene	26	13	1		Pyrene	150	13	1	
Benzo (a) Pyrene	39	13	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	61	32-143		2-Fluorobiphenyl	51	14-146	
2-Fluorophenol	49	15-138		Nitrobenzene-d5	42	18-162	
p-Terphenyl-d14	59	34-148		Phenol-d6	52	17-141	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg
Project: 101510913			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A2 (LAB DUP)	**11-09-1614-7-A**	**09/23/11 12:00**	**Sediment**	**GC/MS MM**	**09/27/11**	**09/28/11 20:14**	**110927L05**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Isophorone	ND	12	1		Benzo (b) Fluoranthene	ND	12	1	
1-Methylnaphthalene	ND	12	1		Benzo (g,h,i) Perylene	ND	12	1	
2,4,5-Trichlorophenol	ND	12	1		Benzo (k) Fluoranthene	ND	12	1	
2,4,6-Trichlorophenol	ND	12	1		Bis(2-Ethylhexyl) Phthalate	ND	12	1	
2,4-Dichlorophenol	ND	12	1		Butyl Benzyl Phthalate	ND	12	1	
2,4-Dimethylphenol	ND	12	1		Chrysene	ND	12	1	
2,4-Dinitrophenol	ND	620	1		Di-n-Butyl Phthalate	ND	12	1	
2-Chlorophenol	ND	12	1		Di-n-Octyl Phthalate	ND	12	1	
2-Methylnaphthalene	ND	12	1		Dibenz (a,h) Anthracene	ND	12	1	
2-Methylphenol	ND	12	1		Diethyl Phthalate	ND	12	1	
2-Nitrophenol	ND	12	1		Dimethyl Phthalate	ND	12	1	
3/4-Methylphenol	ND	12	1		Fluoranthene	ND	12	1	
4,6-Dinitro-2-Methylphenol	ND	620	1		Fluorene	ND	12	1	
4-Chloro-3-Methylphenol	ND	12	1		Indeno (1,2,3-c,d) Pyrene	ND	12	1	
4-Nitrophenol	ND	620	1		Naphthalene	ND	12	1	
Acenaphthene	ND	12	1		Pentachlorophenol	ND	620	1	
Acenaphthylene	ND	12	1		Phenanthrene	ND	12	1	
Anthracene	ND	12	1		Phenol	ND	12	1	
Benzo (a) Anthracene	ND	12	1		Pyrene	ND	12	1	
Benzo (a) Pyrene	ND	12	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	76	32-143		2-Fluorobiphenyl	77	14-146	
2-Fluorophenol	74	15-138		Nitrobenzene-d5	69	18-162	
p-Terphenyl-d14	79	34-148		Phenol-d6	72	17-141	

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

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM
		Units:	ug/kg
Project: 101510913			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-413-332**	**N/A**	**Solid**	**GC/MS MM**	**09/27/11**	**09/28/11 16:48**	**110927L05**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Isophorone	ND	10	1		Benzo (b) Fluoranthene	ND	10	1	
1-Methylnaphthalene	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Bis(2-Ethylhexyl) Phthalate	ND	10	1	
2,4-Dichlorophenol	ND	10	1		Butyl Benzyl Phthalate	ND	10	1	
2,4-Dimethylphenol	ND	10	1		Chrysene	ND	10	1	
2,4-Dinitrophenol	ND	500	1		Di-n-Butyl Phthalate	ND	10	1	
2-Chlorophenol	ND	10	1		Di-n-Octyl Phthalate	ND	10	1	
2-Methylnaphthalene	ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
2-Methylphenol	ND	10	1		Diethyl Phthalate	ND	10	1	
2-Nitrophenol	ND	10	1		Dimethyl Phthalate	ND	10	1	
3/4-Methylphenol	ND	10	1		Fluoranthene	ND	10	1	
4,6-Dinitro-2-Methylphenol	ND	500	1		Fluorene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	
4-Nitrophenol	ND	500	1		Naphthalene	ND	10	1	
Acenaphthene	ND	10	1		Pentachlorophenol	ND	500	1	
Acenaphthylene	ND	10	1		Phenanthrene	ND	10	1	
Anthracene	ND	10	1		Phenol	ND	10	1	
Benzo (a) Anthracene	ND	10	1		Pyrene	ND	10	1	
Benzo (a) Pyrene	ND	10	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2,4,6-Tribromophenol	46	32-143		2-Fluorobiphenyl	73	14-146	
2-Fluorophenol	60	15-138		Nitrobenzene-d5	65	18-162	
p-Terphenyl-d14	71	34-148		Phenol-d6	58	17-141	

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

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: 101510913			Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A1	**11-09-1614-1-A**	**09/23/11 12:00**	**Sediment**	**GC/MS HHH**	**09/27/11**	**09/30/11 17:54**	**110927L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.3	1		PCB128	ND	1.3	1	
PCB018	ND	1.3	1		PCB132	ND	1.3	1	
PCB028	ND	1.3	1		PCB138/158	ND	1.3	1	
PCB031	ND	1.3	1		PCB141	ND	1.3	1	
PCB033	ND	1.3	1		PCB149	ND	1.3	1	
PCB037	ND	1.3	1		PCB151	ND	1.3	1	
PCB044	ND	1.3	1		PCB153	ND	1.3	1	
PCB049	ND	1.3	1		PCB156	ND	1.3	1	
PCB052	ND	1.3	1		PCB157	ND	1.3	1	
PCB056	ND	1.3	1		PCB167	ND	1.3	1	
PCB060	ND	1.3	1		PCB168	ND	1.3	1	
PCB066	ND	1.3	1		PCB169	ND	1.3	1	
PCB070	ND	1.3	1		PCB170	ND	1.3	1	
PCB074	ND	1.3	1		PCB174	ND	1.3	1	
PCB077	ND	1.3	1		PCB177	ND	1.3	1	
PCB081	ND	1.3	1		PCB180	ND	1.3	1	
PCB087	ND	1.3	1		PCB183	ND	1.3	1	
PCB095	ND	1.3	1		PCB184	ND	1.3	1	
PCB097	ND	1.3	1		PCB187	ND	1.3	1	
PCB099	ND	1.3	1		PCB189	ND	1.3	1	
PCB101	ND	1.3	1		PCB194	ND	1.3	1	
PCB105	ND	1.3	1		PCB195	ND	1.3	1	
PCB110	ND	1.3	1		PCB200	ND	1.3	1	
PCB114	ND	1.3	1		PCB201	ND	1.3	1	
PCB118	ND	1.3	1		PCB203	ND	1.3	1	
PCB119	ND	1.3	1		PCB206	ND	1.3	1	
PCB123	ND	1.3	1		PCB209	ND	1.3	1	
PCB126	ND	1.3	1		Total PCB Congeners	ND	1.3	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	85	50-125		p-Terphenyl-d14	119	50-125	

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

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Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: 101510913			Page 2 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A2	**11-09-1614-2-A**	**09/23/11 12:00**	**Sediment**	**GC/MS HHH**	**09/27/11**	**10/04/11 15:46**	**110927L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.2	1		PCB128	ND	1.2	1	
PCB018	ND	1.2	1		PCB132	ND	1.2	1	
PCB028	ND	1.2	1		PCB138/158	ND	1.2	1	
PCB031	ND	1.2	1		PCB141	ND	1.2	1	
PCB033	ND	1.2	1		PCB149	ND	1.2	1	
PCB037	ND	1.2	1		PCB151	ND	1.2	1	
PCB044	ND	1.2	1		PCB153	ND	1.2	1	
PCB049	ND	1.2	1		PCB156	ND	1.2	1	
PCB052	ND	1.2	1		PCB157	ND	1.2	1	
PCB056	ND	1.2	1		PCB167	ND	1.2	1	
PCB060	ND	1.2	1		PCB168	ND	1.2	1	
PCB066	ND	1.2	1		PCB169	ND	1.2	1	
PCB070	ND	1.2	1		PCB170	ND	1.2	1	
PCB074	ND	1.2	1		PCB174	ND	1.2	1	
PCB077	ND	1.2	1		PCB177	ND	1.2	1	
PCB081	ND	1.2	1		PCB180	ND	1.2	1	
PCB087	ND	1.2	1		PCB183	ND	1.2	1	
PCB095	ND	1.2	1		PCB184	ND	1.2	1	
PCB097	ND	1.2	1		PCB187	ND	1.2	1	
PCB099	ND	1.2	1		PCB189	ND	1.2	1	
PCB101	ND	1.2	1		PCB194	ND	1.2	1	
PCB105	ND	1.2	1		PCB195	ND	1.2	1	
PCB110	ND	1.2	1		PCB200	ND	1.2	1	
PCB114	ND	1.2	1		PCB201	ND	1.2	1	
PCB118	ND	1.2	1		PCB203	ND	1.2	1	
PCB119	ND	1.2	1		PCB206	ND	1.2	1	
PCB123	ND	1.2	1		PCB209	ND	1.2	1	
PCB126	ND	1.2	1		Total PCB Congeners	ND	1.2	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	61	50-125		p-Terphenyl-d14	104	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: 101510913			Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A3	**11-09-1614-3-A**	**09/23/11 12:00**	**Sediment**	**GC/MS HHH**	**09/27/11**	**09/30/11 18:47**	**110927L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.3	1		PCB128	ND	1.3	1	
PCB018	ND	1.3	1		PCB132	ND	1.3	1	
PCB028	ND	1.3	1		PCB138/158	ND	1.3	1	
PCB031	ND	1.3	1		PCB141	ND	1.3	1	
PCB033	ND	1.3	1		PCB149	ND	1.3	1	
PCB037	ND	1.3	1		PCB151	ND	1.3	1	
PCB044	ND	1.3	1		PCB153	ND	1.3	1	
PCB049	ND	1.3	1		PCB156	ND	1.3	1	
PCB052	ND	1.3	1		PCB157	ND	1.3	1	
PCB056	ND	1.3	1		PCB167	ND	1.3	1	
PCB060	ND	1.3	1		PCB168	ND	1.3	1	
PCB066	ND	1.3	1		PCB169	ND	1.3	1	
PCB070	ND	1.3	1		PCB170	ND	1.3	1	
PCB074	ND	1.3	1		PCB174	ND	1.3	1	
PCB077	ND	1.3	1		PCB177	ND	1.3	1	
PCB081	ND	1.3	1		PCB180	ND	1.3	1	
PCB087	ND	1.3	1		PCB183	ND	1.3	1	
PCB095	ND	1.3	1		PCB184	ND	1.3	1	
PCB097	ND	1.3	1		PCB187	ND	1.3	1	
PCB099	ND	1.3	1		PCB189	ND	1.3	1	
PCB101	ND	1.3	1		PCB194	ND	1.3	1	
PCB105	ND	1.3	1		PCB195	ND	1.3	1	
PCB110	ND	1.3	1		PCB200	ND	1.3	1	
PCB114	ND	1.3	1		PCB201	ND	1.3	1	
PCB118	ND	1.3	1		PCB203	ND	1.3	1	
PCB119	ND	1.3	1		PCB206	ND	1.3	1	
PCB123	ND	1.3	1		PCB209	ND	1.3	1	
PCB126	ND	1.3	1		Total PCB Congeners	ND	1.3	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	62	50-125		p-Terphenyl-d14	108	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: 101510913			Page 4 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B1	**11-09-1614-4-A**	**09/22/11 16:00**	**Sediment**	**GC/MS HHH**	**09/27/11**	**10/04/11 18:05**	**110927L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.4	1		PCB128	ND	1.4	1	
PCB018	ND	1.4	1		PCB132	ND	1.4	1	
PCB028	ND	1.4	1		PCB138/158	ND	1.4	1	
PCB031	ND	1.4	1		PCB141	ND	1.4	1	
PCB033	ND	1.4	1		PCB149	ND	1.4	1	
PCB037	ND	1.4	1		PCB151	ND	1.4	1	
PCB044	ND	1.4	1		PCB153	ND	1.4	1	
PCB049	2.6	1.4	1		PCB156	ND	1.4	1	
PCB052	ND	1.4	1		PCB157	ND	1.4	1	
PCB056	ND	1.4	1		PCB167	ND	1.4	1	
PCB060	ND	1.4	1		PCB168	ND	1.4	1	
PCB066	ND	1.4	1		PCB169	ND	1.4	1	
PCB070	ND	1.4	1		PCB170	ND	1.4	1	
PCB074	ND	1.4	1		PCB174	ND	1.4	1	
PCB077	ND	1.4	1		PCB177	ND	1.4	1	
PCB081	ND	1.4	1		PCB180	ND	1.4	1	
PCB087	ND	1.4	1		PCB183	ND	1.4	1	
PCB095	ND	1.4	1		PCB184	ND	1.4	1	
PCB097	ND	1.4	1		PCB187	ND	1.4	1	
PCB099	ND	1.4	1		PCB189	ND	1.4	1	
PCB101	ND	1.4	1		PCB194	ND	1.4	1	
PCB105	ND	1.4	1		PCB195	ND	1.4	1	
PCB110	ND	1.4	1		PCB200	ND	1.4	1	
PCB114	ND	1.4	1		PCB201	ND	1.4	1	
PCB118	ND	1.4	1		PCB203	ND	1.4	1	
PCB119	ND	1.4	1		PCB206	ND	1.4	1	
PCB123	ND	1.4	1		PCB209	ND	1.4	1	
PCB126	ND	1.4	1		Total PCB Congeners	2.6	1.4	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	65	50-125		p-Terphenyl-d14	72	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: 101510913			Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B2	**11-09-1614-5-A**	**09/22/11 16:00**	**Sediment**	**GC/MS HHH**	**09/27/11**	**10/04/11 18:31**	**110927L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.3	1		PCB128	ND	1.3	1	
PCB018	ND	1.3	1		PCB132	ND	1.3	1	
PCB028	ND	1.3	1		PCB138/158	ND	1.3	1	
PCB031	ND	1.3	1		PCB141	ND	1.3	1	
PCB033	ND	1.3	1		PCB149	ND	1.3	1	
PCB037	ND	1.3	1		PCB151	ND	1.3	1	
PCB044	ND	1.3	1		PCB153	ND	1.3	1	
PCB049	ND	1.3	1		PCB156	ND	1.3	1	
PCB052	ND	1.3	1		PCB157	ND	1.3	1	
PCB056	ND	1.3	1		PCB167	ND	1.3	1	
PCB060	ND	1.3	1		PCB168	ND	1.3	1	
PCB066	ND	1.3	1		PCB169	ND	1.3	1	
PCB070	ND	1.3	1		PCB170	ND	1.3	1	
PCB074	ND	1.3	1		PCB174	ND	1.3	1	
PCB077	ND	1.3	1		PCB177	ND	1.3	1	
PCB081	ND	1.3	1		PCB180	ND	1.3	1	
PCB087	ND	1.3	1		PCB183	ND	1.3	1	
PCB095	ND	1.3	1		PCB184	ND	1.3	1	
PCB097	ND	1.3	1		PCB187	ND	1.3	1	
PCB099	ND	1.3	1		PCB189	ND	1.3	1	
PCB101	ND	1.3	1		PCB194	ND	1.3	1	
PCB105	ND	1.3	1		PCB195	ND	1.3	1	
PCB110	ND	1.3	1		PCB200	ND	1.3	1	
PCB114	ND	1.3	1		PCB201	ND	1.3	1	
PCB118	ND	1.3	1		PCB203	ND	1.3	1	
PCB119	ND	1.3	1		PCB206	ND	1.3	1	
PCB123	ND	1.3	1		PCB209	ND	1.3	1	
PCB126	ND	1.3	1		Total PCB Congeners	ND	1.3	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	83	50-125		p-Terphenyl-d14	90	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: 101510913			Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B3	**11-09-1614-6-A**	**09/22/11 16:00**	**Sediment**	**GC/MS HHH**	**09/27/11**	**09/30/11 20:06**	**110927L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.3	1		PCB128	ND	1.3	1	
PCB018	ND	1.3	1		PCB132	ND	1.3	1	
PCB028	ND	1.3	1		PCB138/158	ND	1.3	1	
PCB031	ND	1.3	1		PCB141	ND	1.3	1	
PCB033	ND	1.3	1		PCB149	ND	1.3	1	
PCB037	ND	1.3	1		PCB151	ND	1.3	1	
PCB044	ND	1.3	1		PCB153	ND	1.3	1	
PCB049	ND	1.3	1		PCB156	ND	1.3	1	
PCB052	ND	1.3	1		PCB157	ND	1.3	1	
PCB056	ND	1.3	1		PCB167	ND	1.3	1	
PCB060	ND	1.3	1		PCB168	ND	1.3	1	
PCB066	ND	1.3	1		PCB169	ND	1.3	1	
PCB070	ND	1.3	1		PCB170	ND	1.3	1	
PCB074	ND	1.3	1		PCB174	ND	1.3	1	
PCB077	ND	1.3	1		PCB177	ND	1.3	1	
PCB081	ND	1.3	1		PCB180	ND	1.3	1	
PCB087	ND	1.3	1		PCB183	ND	1.3	1	
PCB095	ND	1.3	1		PCB184	ND	1.3	1	
PCB097	ND	1.3	1		PCB187	ND	1.3	1	
PCB099	ND	1.3	1		PCB189	ND	1.3	1	
PCB101	ND	1.3	1		PCB194	ND	1.3	1	
PCB105	ND	1.3	1		PCB195	ND	1.3	1	
PCB110	ND	1.3	1		PCB200	ND	1.3	1	
PCB114	ND	1.3	1		PCB201	ND	1.3	1	
PCB118	ND	1.3	1		PCB203	ND	1.3	1	
PCB119	ND	1.3	1		PCB206	ND	1.3	1	
PCB123	ND	1.3	1		PCB209	ND	1.3	1	
PCB126	ND	1.3	1		Total PCB Congeners	ND	1.3	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	85	50-125		p-Terphenyl-d14	118	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: 101510913			Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A2 (LAB DUP)	**11-09-1614-7-A**	**09/23/11 12:00**	**Sediment**	**GC/MS HHH**	**09/27/11**	**10/04/11 16:14**	**110927L07**

Comment(s): -Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.2	1		PCB128	ND	1.2	1	
PCB018	ND	1.2	1		PCB132	ND	1.2	1	
PCB028	ND	1.2	1		PCB138/158	ND	1.2	1	
PCB031	ND	1.2	1		PCB141	ND	1.2	1	
PCB033	ND	1.2	1		PCB149	ND	1.2	1	
PCB037	ND	1.2	1		PCB151	ND	1.2	1	
PCB044	ND	1.2	1		PCB153	ND	1.2	1	
PCB049	ND	1.2	1		PCB156	ND	1.2	1	
PCB052	ND	1.2	1		PCB157	ND	1.2	1	
PCB056	ND	1.2	1		PCB167	ND	1.2	1	
PCB060	ND	1.2	1		PCB168	ND	1.2	1	
PCB066	ND	1.2	1		PCB169	ND	1.2	1	
PCB070	ND	1.2	1		PCB170	ND	1.2	1	
PCB074	ND	1.2	1		PCB174	ND	1.2	1	
PCB077	ND	1.2	1		PCB177	ND	1.2	1	
PCB081	ND	1.2	1		PCB180	ND	1.2	1	
PCB087	ND	1.2	1		PCB183	ND	1.2	1	
PCB095	ND	1.2	1		PCB184	ND	1.2	1	
PCB097	ND	1.2	1		PCB187	ND	1.2	1	
PCB099	ND	1.2	1		PCB189	ND	1.2	1	
PCB101	ND	1.2	1		PCB194	ND	1.2	1	
PCB105	ND	1.2	1		PCB195	ND	1.2	1	
PCB110	ND	1.2	1		PCB200	ND	1.2	1	
PCB114	ND	1.2	1		PCB201	ND	1.2	1	
PCB118	ND	1.2	1		PCB203	ND	1.2	1	
PCB119	ND	1.2	1		PCB206	ND	1.2	1	
PCB123	ND	1.2	1		PCB209	ND	1.2	1	
PCB126	ND	1.2	1		Total PCB Congeners	ND	1.2	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	55	50-125		p-Terphenyl-d14	85	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: 101510913			Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-417-5**	**N/A**	**Solid**	**GC/MS HHH**	**09/27/11**	**10/04/11 12:09**	**110927L07**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
PCB008	ND	1.0	1		PCB128	ND	1.0	1	
PCB018	ND	1.0	1		PCB132	ND	1.0	1	
PCB028	ND	1.0	1		PCB138/158	ND	1.0	1	
PCB031	ND	1.0	1		PCB141	ND	1.0	1	
PCB033	ND	1.0	1		PCB149	ND	1.0	1	
PCB037	ND	1.0	1		PCB151	ND	1.0	1	
PCB044	ND	1.0	1		PCB153	ND	1.0	1	
PCB049	ND	1.0	1		PCB156	ND	1.0	1	
PCB052	ND	1.0	1		PCB157	ND	1.0	1	
PCB056	ND	1.0	1		PCB167	ND	1.0	1	
PCB060	ND	1.0	1		PCB168	ND	1.0	1	
PCB066	ND	1.0	1		PCB169	ND	1.0	1	
PCB070	ND	1.0	1		PCB170	ND	1.0	1	
PCB074	ND	1.0	1		PCB174	ND	1.0	1	
PCB077	ND	1.0	1		PCB177	ND	1.0	1	
PCB081	ND	1.0	1		PCB180	ND	1.0	1	
PCB087	ND	1.0	1		PCB183	ND	1.0	1	
PCB095	ND	1.0	1		PCB184	ND	1.0	1	
PCB097	ND	1.0	1		PCB187	ND	1.0	1	
PCB099	ND	1.0	1		PCB189	ND	1.0	1	
PCB101	ND	1.0	1		PCB194	ND	1.0	1	
PCB105	ND	1.0	1		PCB195	ND	1.0	1	
PCB110	ND	1.0	1		PCB200	ND	1.0	1	
PCB114	ND	1.0	1		PCB201	ND	1.0	1	
PCB118	ND	1.0	1		PCB203	ND	1.0	1	
PCB119	ND	1.0	1		PCB206	ND	1.0	1	
PCB123	ND	1.0	1		PCB209	ND	1.0	1	
PCB126	ND	1.0	1		Total PCB Congeners	ND	1.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorobiphenyl	88	50-125		p-Terphenyl-d14	93	50-125	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: 101510913			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A1	**11-09-1614-1-A**	**09/23/11 12:00**	**Sediment**	**GC/MS Y**	**09/27/11**	**10/03/11 22:28**	**110927L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	3.3	3.8	0.82	1	J	Tetrabutyltin	ND	3.8	0.97	1	
Monobutyltin	ND	3.8	0.82	1		Tributyltin	6.2	3.8	0.72	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	110	50-130	

A2	**11-09-1614-2-A**	**09/23/11 12:00**	**Sediment**	**GC/MS Y**	**09/27/11**	**10/03/11 19:11**	**110927L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.7	0.81	1		Tetrabutyltin	ND	3.7	0.95	1	
Monobutyltin	ND	3.7	0.81	1		Tributyltin	ND	3.7	0.71	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	121	50-130	

A3	**11-09-1614-3-A**	**09/23/11 12:00**	**Sediment**	**GC/MS Y**	**09/27/11**	**10/03/11 19:44**	**110927L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.9	0.86	1		Tetrabutyltin	ND	3.9	1.0	1	
Monobutyltin	ND	3.9	0.86	1		Tributyltin	ND	3.9	0.76	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	119	50-130	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: 101510913			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B1	**11-09-1614-4-A**	**09/22/11 16:00**	**Sediment**	**GC/MS Y**	**09/27/11**	**10/03/11 20:17**	**110927L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	43	4.2	0.91	1		Tetrabutyltin	ND	4.2	1.1	1	
Monobutyltin	ND	4.2	0.91	1		Tributyltin	42	4.2	0.80	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	123	50-130	

B2	**11-09-1614-5-A**	**09/22/11 16:00**	**Sediment**	**GC/MS Y**	**09/27/11**	**10/03/11 20:49**	**110927L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	3.1	4.0	0.86	1	J	Tetrabutyltin	ND	4.0	1.0	1	
Monobutyltin	ND	4.0	0.86	1		Tributyltin	7.5	4.0	0.76	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	123	50-130	

B3	**11-09-1614-6-A**	**09/22/11 16:00**	**Sediment**	**GC/MS Y**	**09/27/11**	**10/03/11 21:22**	**110927L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.9	0.84	1		Tetrabutyltin	ND	3.9	0.99	1	
Monobutyltin	ND	3.9	0.84	1		Tributyltin	ND	3.9	0.74	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	122	50-130	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.
		Units:	ug/kg
Project: 101510913			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A2 (LAB DUP)	**11-09-1614-7-A**	**09/23/11 12:00**	**Sediment**	**GC/MS Y**	**09/27/11**	**10/03/11 21:55**	**110927L18**

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

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Dibutyltin	ND	3.7	0.81	1		Tetrabutyltin	ND	3.7	0.95	1	
Monobutyltin	ND	3.7	0.81	1		Tributyltin	ND	3.7	0.71	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	128	50-130	

Method Blank	**099-07-016-876**	**N/A**	**Solid**	**GC/MS Y**	**09/27/11**	**09/30/11 17:16**	**110927L18**

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	0.65	1		Tetrabutyltin	ND	3.0	0.77	1	
Monobutyltin	ND	3.0	0.65	1		Tributyltin	ND	3.0	0.58	1	

Surrogates:	REC (%)	Control Limits	Qual
Tripentyltin	81	50-130	

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

Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3050B / EPA 7471A Total
		Method:	EPA 6020 / EPA 7471A
		Units:	mg/kg
Project: 101510913			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A1	**11-09-1614-1-A**	**09/23/11 12:00**	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11 04:51**	**110926L03**

Comment(s): -Mercury analysis was performed on 09/27/11 11:13 with batch 110926L05.
-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	5.75	0.125	1		Mercury	ND	0.0251	1	
Cadmium	ND	0.125	1		Nickel	5.94	0.125	1	
Chromium	7.48	0.125	1		Selenium	ND	0.125	1	
Copper	7.24	0.125	1		Silver	ND	0.125	1	
Lead	2.29	0.125	1		Zinc	24.4	1.25	1	

A2	**11-09-1614-2-A**	**09/23/11 12:00**	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11 04:57**	**110926L03**

Comment(s): -Mercury analysis was performed on 09/27/11 11:15 with batch 110926L05.
-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	7.06	0.123	1		Mercury	ND	0.0247	1	
Cadmium	ND	0.123	1		Nickel	6.40	0.123	1	
Chromium	7.73	0.123	1		Selenium	ND	0.123	1	
Copper	7.44	0.123	1		Silver	ND	0.123	1	
Lead	2.16	0.123	1		Zinc	29.4	1.23	1	

A3	**11-09-1614-3-A**	**09/23/11 12:00**	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11 05:02**	**110926L03**

Comment(s): -Mercury analysis was performed on 09/27/11 11:17 with batch 110926L05.
-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	6.64	0.131	1		Mercury	ND	0.0263	1	
Cadmium	ND	0.131	1		Nickel	6.40	0.131	1	
Chromium	8.28	0.131	1		Selenium	ND	0.131	1	
Copper	7.75	0.131	1		Silver	ND	0.131	1	
Lead	1.97	0.131	1		Zinc	23.0	1.31	1	

B1	**11-09-1614-4-A**	**09/22/11 16:00**	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11 05:07**	**110926L03**

Comment(s): -Mercury analysis was performed on 09/27/11 11:19 with batch 110926L05.
-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	6.64	0.139	1		Mercury	0.241	0.0278	1	
Cadmium	0.339	0.139	1		Nickel	14.4	0.139	1	
Chromium	21.8	0.139	1		Selenium	0.224	0.139	1	
Copper	41.9	0.139	1		Silver	ND	0.139	1	
Lead	40.3	0.139	1		Zinc	72.6	1.39	1	

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

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3050B / EPA 7471A Total
		Method:	EPA 6020 / EPA 7471A
		Units:	mg/kg
Project: 101510913			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B2	**11-09-1614-5-A**	**09/22/11 16:00**	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11 05:12**	**110926L03**

Comment(s): -Mercury analysis was performed on 09/27/11 11:21 with batch 110926L05.
-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	3.46	0.132	1		Mercury	0.0322	0.0265	1	
Cadmium	0.151	0.132	1		Nickel	8.06	0.132	1	
Chromium	10.8	0.132	1		Selenium	ND	0.132	1	
Copper	9.97	0.132	1		Silver	ND	0.132	1	
Lead	4.85	0.132	1		Zinc	37.9	1.32	1	

B3	**11-09-1614-6-A**	**09/22/11 16:00**	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11 05:59**	**110926L03**

Comment(s): -Mercury analysis was performed on 09/27/11 11:28 with batch 110926L05.
-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	3.35	0.129	1		Mercury	0.0555	0.0258	1	
Cadmium	0.132	0.129	1		Nickel	7.03	0.129	1	
Chromium	8.80	0.129	1		Selenium	0.159	0.129	1	
Copper	6.86	0.129	1		Silver	ND	0.129	1	
Lead	2.61	0.129	1		Zinc	25.9	1.29	1	

A2 (LAB DUP)	**11-09-1614-7-A**	**09/23/11 12:00**	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11 06:05**	**110926L03**

Comment(s): -Mercury analysis was performed on 09/27/11 11:30 with batch 110926L05.
-Results are reported on a dry weight basis.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	7.59	0.123	1		Mercury	ND	0.0247	1	
Cadmium	ND	0.123	1		Nickel	6.10	0.123	1	
Chromium	7.83	0.123	1		Selenium	ND	0.123	1	
Copper	6.70	0.123	1		Silver	ND	0.123	1	
Lead	1.97	0.123	1		Zinc	22.2	1.23	1	

Method Blank	**099-12-452-228**	**N/A**	**Solid**	**Mercury**	**09/26/11**	**09/27/11 11:01**	**110926L05**

Comment(s): -Preparation/analysis for Mercury was performed by EPA 7471A.

Parameter	Result	RL	DF	Qual
Mercury	ND	0.0200	1	

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Calscience Environmental Laboratories, Inc.

Analytical Report

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3050B / EPA 7471A Total
		Method:	EPA 6020 / EPA 7471A
		Units:	mg/kg
Project: 101510913			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**096-10-002-2,084**	**N/A**	**Solid**	**ICP/MS 04**	**09/26/11**	**09/27/11 03:59**	**110926L03**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Arsenic	ND	0.100	1		Nickel	ND	0.100	1	
Cadmium	ND	0.100	1		Selenium	ND	0.100	1	
Chromium	ND	0.100	1		Silver	ND	0.100	1	
Copper	ND	0.100	1		Zinc	ND	1.00	1	
Lead	ND	0.100	1						

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

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	09/23/11
Work Order No:	11-09-1614
Preparation:	EPA 3050B
Method:	EPA 6020

Project 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A1	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11**	**110926S03**

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	121	121	80-120	0	0-20	3
Cadmium	25.00	106	115	80-120	8	0-20	
Chromium	25.00	109	114	80-120	4	0-20	
Copper	25.00	113	115	80-120	2	0-20	
Lead	25.00	121	117	80-120	3	0-20	3
Nickel	25.00	106	112	80-120	5	0-20	
Selenium	25.00	105	105	80-120	0	0-20	
Silver	12.50	108	116	80-120	7	0-20	
Zinc	25.00	110	111	80-120	1	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

AMEC Environment & Infrastructure		Date Received	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PDSD Batch Number
A1	**Sediment**	**ICP/MS 04**	**09/26/11**	**09/27/11**	**110926S03**

Analysis Comment: As and Se were analyzed by DRC-mode.

Parameter	SPIKE ADDED	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	109	102	75-125	6	0-20	
Cadmium	25.00	98	98	75-125	0	0-20	
Chromium	25.00	98	95	75-125	2	0-20	
Copper	25.00	98	96	75-125	1	0-20	
Lead	25.00	101	99	75-125	2	0-20	
Nickel	25.00	96	96	75-125	1	0-20	
Selenium	25.00	107	101	75-125	5	0-20	
Silver	12.50	92	91	75-125	1	0-20	
Zinc	25.00	82	79	75-125	2	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

AMEC Environment & Infrastructure		Date Received:	09/23/11
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	N/A
		Method:	SM 2540 B

Project: 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
A1	**Sediment**	**N/A**	**09/26/11**	**09/26/11**	**B0926TSD1**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Solids, Total	79.8	79.7	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	09/23/11
Work Order No:	11-09-1614
Preparation:	EPA 7471A Total
Method:	EPA 7471A

Project 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A1	**Sediment**	**Mercury**	**09/26/11**	**09/27/11**	**110926S05**

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	111	108	76-136	2	0-16	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	09/23/11
Work Order No:	11-09-1614
Preparation:	EPA 3545
Method:	Organotins by Krone et al.

Project 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A1	**Sediment**	**GC/MS Y**	**09/27/11**	**09/30/11**	**110927S18A**

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	100.0	165	157	50-130	5	0-20	3
Tributyltin	100.0	140	142	50-130	1	0-20	3

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	09/23/11
Work Order No:	11-09-1614
Preparation:	EPA 3545
Method:	EPA 8270C SIM

Project 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A1	**Sediment**	**GC/MS MM**	**09/27/11**	**09/28/11**	**110927S05**

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	88	81	40-160	8	0-20	
2,4-Dichlorophenol	1000	77	70	40-160	9	0-20	
2-Methylphenol	1000	81	77	40-160	6	0-20	
2-Nitrophenol	1000	81	76	40-160	6	0-20	
4-Chloro-3-Methylphenol	1000	81	75	40-160	8	0-20	
Acenaphthene	1000	86	80	40-106	8	0-20	
Benzo (a) Pyrene	1000	91	85	17-163	7	0-20	
Chrysene	1000	30	28	17-168	7	0-20	
Di-n-Butyl Phthalate	1000	87	81	40-160	6	0-20	
Dimethyl Phthalate	1000	86	80	40-160	7	0-20	
Fluoranthene	1000	88	83	26-137	5	0-20	
Fluorene	1000	90	84	59-121	7	0-20	
Naphthalene	1000	77	74	21-133	4	0-20	
Phenanthrene	1000	86	82	54-120	5	0-20	
Phenol	1000	74	71	40-160	4	0-20	
Pyrene	1000	76	71	6-156	7	0-46	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	09/23/11
Work Order No:	11-09-1614
Preparation:	EPA 3545
Method:	EPA 8081A

Project 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A1	**Sediment**	**GC 51**	**09/27/11**	**09/28/11**	**110927S06**

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	58	66	50-135	13	0-25	
Alpha-BHC	5.000	55	59	50-135	8	0-25	
Beta-BHC	5.000	62	66	50-135	7	0-25	
Delta-BHC	5.000	54	55	50-135	1	0-25	
Gamma-BHC	5.000	55	59	50-135	5	0-25	
Dieldrin	5.000	57	70	50-135	20	0-25	
4,4'-DDD	5.000	72	89	50-135	20	0-25	
4,4'-DDE	5.000	74	81	50-135	9	0-25	
4,4'-DDT	5.000	49	62	50-135	16	0-25	3
Endosulfan I	5.000	54	60	50-135	11	0-25	
Endosulfan II	5.000	69	77	50-135	10	0-25	
Endosulfan Sulfate	5.000	61	62	50-135	2	0-25	
Endrin	5.000	74	78	50-135	5	0-25	
Endrin Aldehyde	5.000	53	59	50-135	11	0-25	
Endrin Ketone	5.000	68	72	50-135	5	0-25	
Heptachlor	5.000	62	70	50-135	12	0-25	
Heptachlor Epoxide	5.000	55	63	50-135	14	0-25	
Methoxychlor	5.000	62	72	50-135	14	0-25	
Alpha Chlordane	5.000	60	82	50-135	31	0-25	4
Gamma Chlordane	5.000	54	64	50-135	16	0-25	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received:	09/23/11
Work Order No:	11-09-1614
Preparation:	EPA 3545
Method:	EPA 8270C SIM PCB Congeners

Project 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A1	**Sediment**	**GC/MS HHH**	**09/27/11**	**10/04/11**	**110927S07**

Parameter	SPIKE ADDED	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
PCB008	25.00	99	100	50-125	1	0-30	
PCB018	25.00	95	96	50-125	1	0-30	
PCB028	25.00	97	97	50-125	0	0-30	
PCB044	25.00	96	96	50-125	0	0-30	
PCB052	25.00	94	93	50-125	0	0-30	
PCB066	25.00	97	97	50-125	0	0-30	
PCB077	25.00	99	99	50-125	0	0-30	
PCB101	25.00	99	99	50-125	1	0-30	
PCB105	25.00	98	97	50-125	1	0-30	
PCB118	25.00	100	99	50-125	0	0-30	
PCB126	25.00	93	92	50-125	1	0-30	
PCB128	25.00	100	100	50-125	0	0-30	
PCB153	25.00	97	97	50-125	0	0-30	
PCB170	25.00	91	92	50-125	0	0-30	
PCB180	25.00	101	101	50-125	1	0-30	
PCB187	25.00	99	99	50-125	1	0-30	
PCB195	25.00	109	111	50-125	1	0-30	
PCB206	25.00	106	106	50-125	0	0-30	
PCB209	25.00	110	111	50-125	1	0-30	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3050B
		Method:	EPA 6020

Project: 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-10-002-2,084	**Solid**	**ICP/MS 04**	**09/26/11**	**09/27/11**	**110926L03**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	109	102	80-120	7	0-20	
Cadmium	25.00	101	101	80-120	0	0-20	
Chromium	25.00	103	102	80-120	2	0-20	
Copper	25.00	108	107	80-120	1	0-20	
Lead	25.00	102	102	80-120	0	0-20	
Nickel	25.00	106	105	80-120	1	0-20	
Selenium	25.00	99	97	80-120	2	0-20	
Silver	12.50	94	94	80-120	0	0-20	
Zinc	25.00	102	99	80-120	2	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 7471A Total
		Method:	EPA 7471A

Project: 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-452-228	**Solid**	**Mercury**	**09/26/11**	**09/27/11**	**110926L05**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	100	99	82-124	2	0-16	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	Organotins by Krone et al.

Project: 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-016-876	**Solid**	**GC/MS Y**	**09/27/11**	**09/30/11**	**110927L18**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Tetrabutyltin	100.0	87	90	50-130	3	0-20	
Tributyltin	100.0	89	85	50-130	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8270C SIM

Project: 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-413-332	**Solid**	**GC/MS MM**	**09/27/11**	**09/28/11**	**110927L05**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	56	56	40-160	20-180	1	0-20	
2,4-Dichlorophenol	1000	65	64	40-160	20-180	1	0-20	
2-Methylphenol	1000	73	73	40-160	20-180	0	0-20	
2-Nitrophenol	1000	52	51	40-160	20-180	2	0-20	
4-Chloro-3-Methylphenol	1000	69	69	40-160	20-180	0	0-20	
Acenaphthene	1000	76	76	48-108	38-118	1	0-11	
Benzo (a) Pyrene	1000	78	78	17-163	0-187	0	0-20	
Chrysene	1000	25	25	17-168	0-193	1	0-20	
Di-n-Butyl Phthalate	1000	76	75	40-160	20-180	2	0-20	
Dimethyl Phthalate	1000	76	75	40-160	20-180	1	0-20	
Fluoranthene	1000	76	75	26-137	8-156	2	0-20	
Fluorene	1000	80	79	59-121	49-131	0	0-20	
Naphthalene	1000	75	76	21-133	2-152	0	0-20	
Phenanthrene	1000	77	76	54-120	43-131	1	0-20	
Phenol	1000	67	67	40-160	20-180	0	0-20	
Pyrene	1000	68	68	28-106	15-119	0	0-16	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AMEC Environment & Infrastructure		Date Received:	N/A
9210 Sky Park Court, Suite 200		Work Order No:	11-09-1614
San Diego, CA 92123-4302		Preparation:	EPA 3545
		Method:	EPA 8081A

Project: 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-858-113	**Solid**	**GC 51**	**09/27/11**	**09/28/11**	**110927L06**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Aldrin	6.500	57	64	50-135	36-149	11	0-25	
Alpha-BHC	6.500	61	68	50-135	36-149	12	0-25	
Beta-BHC	6.500	69	77	50-135	36-149	11	0-25	
Delta-BHC	6.500	55	62	50-135	36-149	11	0-25	
Gamma-BHC	6.500	65	73	50-135	36-149	12	0-25	
Dieldrin	6.500	64	71	50-135	36-149	11	0-25	
4,4'-DDD	6.500	68	79	50-135	36-149	14	0-25	
4,4'-DDE	6.500	73	81	50-135	36-149	10	0-25	
4,4'-DDT	6.500	81	88	50-135	36-149	9	0-25	
Endosulfan I	6.500	58	65	50-135	36-149	11	0-25	
Endosulfan II	6.500	78	84	50-135	36-149	7	0-25	
Endosulfan Sulfate	6.500	59	63	50-135	36-149	8	0-25	
Endrin	6.500	79	86	50-135	36-149	8	0-25	
Endrin Aldehyde	6.500	66	73	50-135	36-149	10	0-25	
Endrin Ketone	6.500	69	79	50-135	36-149	14	0-25	
Heptachlor	6.500	62	69	50-135	36-149	11	0-25	
Heptachlor Epoxide	6.500	57	64	50-135	36-149	10	0-25	
Methoxychlor	6.500	68	80	50-135	36-149	17	0-25	
Alpha Chlordane	6.500	63	70	50-135	36-149	11	0-25	
Gamma Chlordane	6.500	56	63	50-135	36-149	12	0-25	

Total number of LCS compounds : 20
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 11-09-1614
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: 101510913

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-417-5	**Solid**	**GC/MS HHH**	**09/27/11**	**10/03/11**	**110927L07**

Parameter	SPIKE ADDED	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
PCB008	50.00	95	97	50-125	38-138	2	0-30	
PCB018	50.00	92	94	50-125	38-138	2	0-30	
PCB028	50.00	97	96	50-125	38-138	1	0-30	
PCB044	50.00	96	95	50-125	38-138	1	0-30	
PCB052	50.00	94	93	50-125	38-138	1	0-30	
PCB066	50.00	100	97	50-125	38-138	3	0-30	
PCB077	50.00	94	90	50-125	38-138	4	0-30	
PCB101	50.00	101	99	50-125	38-138	2	0-30	
PCB105	50.00	99	97	50-125	38-138	2	0-30	
PCB118	50.00	102	99	50-125	38-138	2	0-30	
PCB126	50.00	90	87	50-125	38-138	4	0-30	
PCB128	50.00	102	100	50-125	38-138	2	0-30	
PCB153	50.00	99	97	50-125	38-138	2	0-30	
PCB170	50.00	92	92	50-125	38-138	0	0-30	
PCB180	50.00	103	102	50-125	38-138	2	0-30	
PCB187	50.00	102	100	50-125	38-138	2	0-30	
PCB195	50.00	115	114	50-125	38-138	1	0-30	
PCB206	50.00	102	100	50-125	38-138	1	0-30	
PCB209	50.00	107	107	50-125	38-138	0	0-30	

Total number of LCS compounds : 19
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 11-09-1614

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
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 (MS) or Matrix Spike Duplicate (MSD) 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 or PES/PESD 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 without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

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Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

11-09-1614

DATE:

PAGE: 1 OF 1

LABORATORY CLIENT: AMEC Environment & Infrastructure

ADDRESS: 9210 Sky Park Ct. Ste 200

CITY: San Diego, CA 92123

TEL: 858-300-4300 | FAX: 858-300-4301 | E-MAIL: barry.snyder@amec.com

CLIENT PROJECT NAME / NUMBER: 101510913

PROJECT CONTACT: Barry Snyder

SAMPLER(S): (SIGNATURE) Bt A Snyder

P.O. NO.:

QUOTE NO.:

LAB USE ONLY: 09-1614

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☒ Standard

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
Report results in dry weight.
Please contact Barry Snyder with any questions.
Analyte list & Detection limits provided

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING DATE	SAMPLING TIME	Matrix	#Cont	Please list tests required	Total Solids (SM 2540 B)	Metals including Mercury (6020/6010B and 7471A)	PAHs (8270C)	Chlorinated Pesticides (8081A)	PCB Congeners (8270C SIM)	Phenols (8270C SIM)	Phthalates (8270C SIM)	Organotins (Rice/Krone)
1	A1	POLA Berth 167-169	9/23/11	1200	sed	1		X	X	X	X	X	X	X	X
2	A2	POLA Berth 167-169	9/23/11	1200	sed	1		X	X	X	X	X	X	X	X
3	A3	POLA Berth 167-169	9/23/11	1200	sed	1		X	X	X	X	X	X	X	X
4	B1	POLA Berth 167-169	9/22/11	1600	sed	1		X	X	X	X	X	X	X	X
5	B2	POLA Berth 167-169	9/22/11	1600	sed	1		X	X	X	X	X	X	X	X
6	B3	POLA Berth 167-169	9/22/11	1600	sed	1		X	X	X	X	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
BtAM	Dannyle CZL	9-23-11	15:25
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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Phase II Analytical Methods and Detection Limits

Analyte	Analysis Method	Sediment Target Detection Limits[a,b]
Total Solids	SM 2540 B	0.1%
Arsenic (As)	6020/6010B[d]	0.1 mg/kg
Cadmium (Cd)	6020/6010B[d]	0.1 mg/kg
Chromium (Cr)	6020/6010B[d]	0.1 mg/kg
Copper (Cu)	6020/6010B[d]	0.1 mg/kg
Lead (Pb)	6020/6010B[d]	0.1 mg/kg
Mercury (Hg)	7471A[d]	0.02 mg/kg
Nickel (Ni)	6020/6010B[d]	0.1 mg/kg
Selenium (Se)	6020/6010B[d]	0.1 mg/kg
Silver (Ag)	6020/6010B[d]	0.1 mg/kg
Zinc (Zn)	6020/6010B[d]	2.0 mg/kg
PAHs[e]	8270C SIM[d]	20 µg/kg
Chlorinated Pesticides[f]	8081A[d]	0.5 to 30 µg/kg
PCB Congeners[g]	8270C SIM	1.0 µg/kg
Phenols	8270C SIM[d]	20 to 100 µg/kg
Phthalates	8270C SIM[d]	10 µg/kg
Organotins	Rice/Krone[h]	1.0 µg/kg

Notes:

a Sediment minimum detection limits are on a wet-weight basis.

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

c Standard Methods for the Examination of Water and Wastewater, 19th edition, American Public Health Association et al. 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, □-BHC, □-BHC, □-BHC (lindane), □-BHC, chlordane, 2,4- and 4,4-DDD, 2,4- and 4,4-DDE, 2,4- and 4,4-DDT, dieldrin, endosulfan I and II, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, and toxaphene.

g PCBs (sum of 41 congeners: 18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194,201, and 206)

µg/kg micrograms per kilogram (parts per billion)

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

PAH polycyclic aromatic hydrocarbon

PCB polychlorinated biphenyl

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 11-09-1614

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: AMEC

DATE: 09/23/11

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.1 °C + 0.5 °C (CF) = 3.6 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter Initial: D.L

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: D.L

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: D.L

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☑16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** DL

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** YL

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** YL

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