APPENDIX B
PERFORMANCE EVALUATION RESULTS

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
PES SCORING EVALUATION REPORT

PES:	SRS1830	**EPA Sample No.:**	SRS1830	**Report Date:**	07/11/2014
Lab Name:	Calscience Environmental Laboratories, Inc.			**Lab Code:**	Calscience
Contract:	14-05-1480	**Case No.:**	PV Shelf	**SAS/Client No.:**	NR
SDG No.:	NR	**Matrix:**	Sediment	**Lab Sample ID:**	14-05-1480-1-A
Lab File ID:	NR	**Date Received:**	05/20/2014	**Date Extracted:**	06/04/2014
Date Analyzed:	06/10/2014	**Sample Wt./Vol. (g/mL):**	NR	**Level:**	NA
% Moisture:	0.0%	**Decanted:**	No	**Conc. Extract Vol. (µL):**	NR
Inject. Vol. (µL):	NR	**GPC Cleanup:**	NR	**pH:**	NA
Dilution Factor:	5.0	**Extraction Type:**	NR	**Units:**	µg/Kg
Analysis Method:	EPA Method 8270C	**GPC Factor:**	NR		
Scoring Method:	Manual	**Sulfur Cleanup:**	NR		
Comments:	Scored by CB&I Personnel				

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
72-54-8	4,4'-DDD	1900		Pass	Within Limits
72-55-9	4,4'-DDE	1400		Pass	Within Limits
50-29-3	4,4'-DDT	2000		Pass	Within Limits
53-19-0	2,4'-DDD	1200		Pass	Within Limits
3424-82-6	2,4'-DDE	1300		Pass	Within Limits
789-02-6	2,4'-DDT	1200		Pass	Within Limits
****	Total DDT	9000		Pass	Within Limits
****	END All Analytes	**********	****	******	**********

NL = No Limit
NR = Not Reported
NE = Not Evaluated
NA = Not Applicable

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
PES SCORING EVALUATION REPORT

PES:	SRS1830	**EPA Sample No.:**	SRS1830	**Report Date:**	07/11/2014
Lab Name:	Calscience Environmental Laboratories, Inc.			**Lab Code:**	Calscience
Contract:	14-05-1480	**Case No.:**	PV Shelf	**SAS/Client No.:**	NR
SDG No.:	NR	**Matrix:**	Sediment	**Lab Sample ID:**	14-05-1480-1-A
Lab File ID:	NR	**Date Received:**	05/20/2014	**Date Extracted:**	06/04/2014
Date Analyzed:	06/10/2014	**Sample Wt./Vol. (g/mL):**	NR	**Level:**	NA
% Moisture:	0.0%	**Decanted:**	No	**Conc. Extract Vol. (µL):**	NR
Inject. Vol. (µL):	NR	**GPC Cleanup:**	NR	**pH:**	NA
Dilution Factor:	1.0	**Extraction Type:**	NR	**Units:**	µg/Kg
Analysis Method:	EPA Method 8270C	**GPC Factor:**	NR		
Scoring Method:	Manual	**Sulfur Cleanup:**	NR		
Comments:	Scored by CB&I Personnel				

PCB Number	Laboratory Results		PES Evaluation	
	Concentration	Q		
008	0.37		Pass	Within Limits
018	0.83		Pass	Within Limits
028	<0.20		NE	NE
031	<0.20		NE	NE
033	<0.20		NE	NE
044	1.8		Pass	Within Limits
049	1.2		Pass	Within Limits
052	2.5		Pass	Within Limits
066	1.1		Pass	Within Limits
070/074	1.9		Pass	Within Limits
087/097	<0.20		NE	NE
095/098	3.8		Pass	Within Limits
099	1.5		Pass	Within Limits
101	4.2		Pass	Within Limits
105	<0.20		NE	NE
110	3.6		Pass	Within Limits
118	2.6		Pass	Within Limits
128	0.81		Pass	Within Limits
132/153/168	14		Pass	Within Limits
129/138/160/163	9.9		Pass	Within Limits
141	2.5		Pass	Within Limits
147/149	6.4		Pass	Warning Low
135/151/154	2.5		Pass	Warning Low
156/157	0.50		Pass	Within Limits
158	9.9		NE	NE
170	3.2		Pass	Within Limits
174	4.6		Pass	Within Limits
177	1.8		Pass	Within Limits
180/193	8.6		Pass	Within Limits
183/185	1.9		Pass	Warning Low

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
PES SCORING EVALUATION REPORT

PCB Number	Laboratory Results		PES Evaluation	
	Concentration	Q		
187	4.1		Pass	Within Limits
194	2.0		Pass	Within Limits
195	0.94		Pass	Within Limits
201	0.28		Pass	Within Limits
203	1.7		Pass	Within Limits
206	0.62		Pass	Within Limits
Total PCBs	NR		NE	NE
END All Analytes	**********	****	******	**********

NL = No Limit
NR = Not Reported
NE = Not Evaluated
NA = Not Applicable

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
PES SCORING EVALUATION REPORT

PES:	SRS1830	**EPA Sample No.:**	SRS1830	**Report Date:**	07/11/2014
Lab Name:	Calscience Environmental Laboratories, Inc.			**Lab Code:**	Calscience
Contract:	14-05-1480	**Case No.:**	PV Shelf	**SAS/Client No.:**	NR
SDG No.:	NR	**Matrix:**	Sediment	**Lab Sample ID:**	14-05-1480-1-A
Lab File ID:	NR	**Date Received:**	05/20/2014	**Date Extracted:**	NA
Date Analyzed:	06/06/2014	**Sample Wt./Vol. (g/mL):**	NR	**Level:**	NA
% Moisture:	0.0%	**Decanted:**	NA	**Conc. Extract Vol. (µL):**	NR
Inject. Vol. (µL):	NR	**GPC Cleanup:**	NA	**pH:**	NA
Dilution Factor:	NA	**Extraction Type:**	NA	**Units:**	%
Analysis Method:	EPA Method 9060A	**GPC Factor:**	NA		
Scoring Method:	Manual	**Sulfur Cleanup:**	NA		
Comments:	Scored by CB&I Personnel				

CAS No.	Analyte	Laboratory Results		PES Evaluation	
		Concentration	Q		
****	Total Organic Carbon	2.2		Pass	Within Limits
****	END All Analytes	**********	****	******	**********

NL = No Limit
NR = Not Reported
NE = Not Evaluated
NA = Not Applicable

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WORK ORDER NUMBER: 14-05-1480

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Gilbane

Client Project Name: PALOS VERDE SHELF

Attention: Kristen Carlyon
2730 Shadelands Drive, Suite 100
Walnut Creek, CA 94598-2540

Approved for release on 06/25/2014 by:
Danielle Gonsman
Project Manager

ResultLink

Email your PM

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Client Project Name: PALOS VERDE SHELF
Work Order Number: 14-05-1480

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Work Order Narrative

Work Order: 14-05-1480 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/20/14. They were assigned to Work Order 14-05-1480.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

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

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

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Sample Summary

Client:	Gilbane	Work Order:	14-05-1480
	2730 Shadelands Drive, Suite 100	Project Name:	PALOS VERDE SHELF
	Walnut Creek, CA 94598-2540	PO Number:	
		Date/Time Received:	05/20/14 10:30
		Number of Containers:	1
Attn:	Kristen Carlyon		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SRS1830	14-05-1480-1	05/19/14 00:00	1	Sediment

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Analytical Report

Gilbane
2730 Shadelands Drive, Suite 100
Walnut Creek, CA 94598-2540

Project: PALOS VERDE SHELF

Date Received: 05/20/14
Work Order: 14-05-1480
Preparation: N/A
Method: EPA 9060A
Units: mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SRS1830	**14-05-1480-1-A**	**05/19/14 00:00**	**Sediment**	**TOC 5**	**06/06/14**	**06/06/14 14:40**	**E0606TOCL1**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	22000	500	120	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-06-013-1057**	**N/A**	**Solid**	**TOC 5**	**06/06/14**	**06/06/14 14:40**	**E0606TOCL1**

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

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	500	120	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Gilbane
2730 Shadelands Drive, Suite 100
Walnut Creek, CA 94598-2540

Date Received: 05/20/14
Work Order: 14-05-1480
Preparation: EPA 3545
Method: EPA 8270C PEST-SIM
Units: ug/kg

Project: PALOS VERDE SHELF

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SRS1830	**14-05-1480-1-A**	**05/19/14 00:00**	**Sediment**	**GC/MS HHH**	**06/04/14**	**06/10/14 21:38**	**140604L31**

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

Parameter	Result	RL	MDL	DF	Qualifiers
4,4'-DDMU	ND	5.0	1.4	1.00	
4,4'-DDNU	ND	5.0	1.5	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4,5,6-Tetrachloro-m-Xylene	83	50-125	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SRS1830	**14-05-1480-1-A**	**05/19/14 00:00**	**Sediment**	**GC/MS HHH**	**06/04/14**	**06/10/14 15:21**	**140604L31**

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	1200	25	12	5.00	
2,4'-DDE	1300	25	7.4	5.00	
2,4'-DDT	1200	25	14	5.00	
4,4'-DDD	1900	25	15	5.00	
4,4'-DDE	1400	25	9.9	5.00	
4,4'-DDT	2000	25	16	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4,5,6-Tetrachloro-m-Xylene	90	50-125	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Gilbane
2730 Shadelands Drive, Suite 100
Walnut Creek, CA 94598-2540

Project: PALOS VERDE SHELF

Date Received: 05/20/14
Work Order: 14-05-1480
Preparation: EPA 3545
Method: EPA 8270C PEST-SIM
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-13-013-73**	**N/A**	**Solid**	**GC/MS HHH**	**06/04/14**	**06/10/14 13:36**	**140604L31**

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

Parameter	Result	RL	MDL	DF	Qualifiers
2,4'-DDD	ND	5.0	2.3	1.00	
2,4'-DDE	ND	5.0	1.5	1.00	
2,4'-DDT	ND	5.0	2.9	1.00	
4,4'-DDD	ND	5.0	3.0	1.00	
4,4'-DDE	ND	5.0	2.0	1.00	
4,4'-DDMU	ND	5.0	1.4	1.00	
4,4'-DDNU	ND	5.0	1.5	1.00	
4,4'-DDT	ND	5.0	3.2	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2,4,5,6-Tetrachloro-m-Xylene	83	50-125	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Gilbane
2730 Shadelands Drive, Suite 100
Walnut Creek, CA 94598-2540

Date Received: 05/20/14
Work Order: 14-05-1480
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: PALOS VERDE SHELF

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SRS1830	**14-05-1480-1-A**	**05/19/14 00:00**	**Sediment**	**GC/MS HHH**	**06/04/14**	**06/10/14 22:10**	**140604L30**

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.20	0.047	1.00	
PCB005/008	0.37	0.40	0.047	1.00	J
PCB015	ND	0.20	0.023	1.00	
PCB018	0.83	0.20	0.039	1.00	
PCB027	ND	0.20	0.028	1.00	
PCB028	ND	0.20	0.055	1.00	
PCB029	ND	0.20	0.035	1.00	
PCB031	ND	0.20	0.029	1.00	
PCB033	ND	0.20	0.035	1.00	
PCB037	ND	0.20	0.035	1.00	
PCB044	1.8	0.20	0.092	1.00	
PCB049	1.2	0.20	0.086	1.00	
PCB052	2.5	0.20	0.051	1.00	
PCB056	ND	0.20	0.048	1.00	
PCB060	ND	0.20	0.063	1.00	
PCB066	1.1	0.20	0.075	1.00	
PCB070	1.3	0.20	0.048	1.00	
PCB074	0.63	0.20	0.046	1.00	
PCB077	0.65	0.20	0.085	1.00	
PCB081	ND	0.20	0.064	1.00	
PCB087	ND	0.20	0.041	1.00	
PCB095	3.8	0.20	0.050	1.00	
PCB097	ND	0.20	0.043	1.00	
PCB099	1.5	0.20	0.054	1.00	
PCB101	4.2	0.20	0.051	1.00	
PCB105	ND	0.20	0.042	1.00	
PCB110	3.6	0.20	0.046	1.00	
PCB114	ND	0.20	0.036	1.00	
PCB118	2.6	0.20	0.059	1.00	
PCB119	ND	0.20	0.046	1.00	
PCB123	ND	0.20	0.047	1.00	
PCB126	ND	0.20	0.034	1.00	
PCB128	0.81	0.20	0.039	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Gilbane
2730 Shadelands Drive, Suite 100
Walnut Creek, CA 94598-2540

Date Received: 05/20/14
Work Order: 14-05-1480
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: PALOS VERDE SHELF

Parameter	Result	RL	MDL	DF	Qualifiers
PCB132/153	14	0.40	0.067	1.00	
PCB137	ND	0.20	0.048	1.00	
PCB138/158	9.9	0.40	0.075	1.00	
PCB141	2.5	0.20	0.098	1.00	
PCB149	6.4	0.20	0.048	1.00	
PCB151	2.5	0.20	0.062	1.00	
PCB156	0.50	0.20	0.066	1.00	
PCB157	ND	0.20	0.051	1.00	
PCB167	ND	0.20	0.042	1.00	
PCB168	ND	0.20	0.045	1.00	
PCB169	ND	0.20	0.033	1.00	
PCB170	3.2	0.20	0.050	1.00	
PCB174	4.6	0.20	0.039	1.00	
PCB177	1.8	0.20	0.040	1.00	
PCB180	8.6	0.20	0.030	1.00	
PCB183	1.9	0.20	0.032	1.00	
PCB184	ND	0.20	0.041	1.00	
PCB187	4.1	0.20	0.039	1.00	
PCB189	ND	0.20	0.025	1.00	
PCB194	2.0	0.20	0.041	1.00	
PCB195	0.94	0.20	0.032	1.00	
PCB200	ND	0.20	0.059	1.00	
PCB201	0.28	0.20	0.044	1.00	
PCB203	1.7	0.20	0.035	1.00	
PCB206	0.62	0.20	0.045	1.00	
PCB209	0.21	0.20	0.067	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	77	50-150	
p-Terphenyl-d14	73	50-150	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Gilbane		Date Received:	05/20/14
2730 Shadelands Drive, Suite 100		Work Order:	14-05-1480
Walnut Creek, CA 94598-2540		Preparation:	EPA 3545
		Method:	EPA 8270C SIM PCB Congeners
		Units:	ug/kg
Project: PALOS VERDE SHELF			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-16-418-9**	**N/A**	**Solid**	**GC/MS HHH**	**06/04/14**	**06/16/14 20:07**	**140604L30**

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

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.20	0.047	1.00	
PCB005/008	ND	0.40	0.047	1.00	
PCB015	ND	0.20	0.023	1.00	
PCB018	ND	0.20	0.039	1.00	
PCB027	ND	0.20	0.028	1.00	
PCB028	ND	0.20	0.055	1.00	
PCB029	ND	0.20	0.035	1.00	
PCB031	ND	0.20	0.029	1.00	
PCB033	ND	0.20	0.035	1.00	
PCB037	ND	0.20	0.035	1.00	
PCB044	ND	0.20	0.092	1.00	
PCB049	ND	0.20	0.086	1.00	
PCB052	ND	0.20	0.051	1.00	
PCB056	ND	0.20	0.048	1.00	
PCB060	ND	0.20	0.063	1.00	
PCB066	ND	0.20	0.075	1.00	
PCB070	ND	0.20	0.048	1.00	
PCB074	ND	0.20	0.046	1.00	
PCB077	ND	0.20	0.085	1.00	
PCB081	ND	0.20	0.064	1.00	
PCB087	ND	0.20	0.041	1.00	
PCB095	ND	0.20	0.050	1.00	
PCB097	ND	0.20	0.043	1.00	
PCB099	ND	0.20	0.054	1.00	
PCB101	ND	0.20	0.051	1.00	
PCB105	ND	0.20	0.042	1.00	
PCB110	ND	0.20	0.046	1.00	
PCB114	ND	0.20	0.036	1.00	
PCB118	ND	0.20	0.059	1.00	
PCB119	ND	0.20	0.046	1.00	
PCB123	ND	0.20	0.047	1.00	
PCB126	ND	0.20	0.034	1.00	
PCB128	ND	0.20	0.039	1.00	
PCB132/153	ND	0.40	0.067	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Gilbane
2730 Shadelands Drive, Suite 100
Walnut Creek, CA 94598-2540

Date Received: 05/20/14
Work Order: 14-05-1480
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: PALOS VERDE SHELF

Parameter	Result	RL	MDL	DF	Qualifiers
PCB137	ND	0.20	0.048	1.00	
PCB138/158	ND	0.40	0.075	1.00	
PCB141	ND	0.20	0.098	1.00	
PCB149	ND	0.20	0.048	1.00	
PCB151	ND	0.20	0.062	1.00	
PCB156	ND	0.20	0.066	1.00	
PCB157	ND	0.20	0.051	1.00	
PCB167	ND	0.20	0.042	1.00	
PCB168	ND	0.20	0.045	1.00	
PCB169	ND	0.20	0.033	1.00	
PCB170	ND	0.20	0.050	1.00	
PCB174	ND	0.20	0.039	1.00	
PCB177	ND	0.20	0.040	1.00	
PCB180	ND	0.20	0.030	1.00	
PCB183	ND	0.20	0.032	1.00	
PCB184	ND	0.20	0.041	1.00	
PCB187	ND	0.20	0.039	1.00	
PCB189	ND	0.20	0.025	1.00	
PCB194	ND	0.20	0.041	1.00	
PCB195	ND	0.20	0.032	1.00	
PCB200	ND	0.20	0.059	1.00	
PCB201	ND	0.20	0.044	1.00	
PCB203	ND	0.20	0.035	1.00	
PCB206	ND	0.20	0.045	1.00	
PCB209	ND	0.20	0.067	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
2-Fluorobiphenyl	89	50-150	
p-Terphenyl-d14	77	50-150	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - LCS/LCSD

Gilbane	Date Received: 05/20/14
2730 Shadelands Drive, Suite 100	Work Order: 14-05-1480
Walnut Creek, CA 94598-2540	Preparation: N/A
	Method: EPA 9060A
Project: PALOS VERDE SHELF	Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-06-013-1057	**LCS**	**Solid**	**TOC 5**	**06/06/14**	**06/06/14 14:40**	**E0606TOCL1**
099-06-013-1057	**LCSD**	**Solid**	**TOC 5**	**06/06/14**	**06/06/14 14:40**	**E0606TOCL1**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	6000	5442	91	5636	94	80-120	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Gilbane	Date Received: 05/20/14
2730 Shadelands Drive, Suite 100	Work Order: 14-05-1480
Walnut Creek, CA 94598-2540	Preparation: EPA 3545
	Method: EPA 8270C PEST-SIM
Project: PALOS VERDE SHELF	Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-13-013-73	**LCS**	**Solid**	**GC/MS HHH**	**06/04/14**	**06/24/14 12:18**	**140604L31**
099-13-013-73	**LCSD**	**Solid**	**GC/MS HHH**	**06/04/14**	**06/24/14 12:54**	**140604L31**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4'-DDD	100.0	116.4	116	114.8	115	50-125	1	0-30	
2,4'-DDE	100.0	107.3	107	109.4	109	50-125	2	0-30	
2,4'-DDT	100.0	100.0	100	94.57	95	50-125	6	0-30	
4,4'-DDD	100.0	120.2	120	115.1	115	50-125	4	0-30	
4,4'-DDE	100.0	123.1	123	119.3	119	50-125	3	0-30	
4,4'-DDMU	100.0	96.15	96	94.99	95	50-125	1	0-30	
4,4'-DDNU	100.0	109.3	109	109.4	109	50-125	0	0-30	
4,4'-DDT	100.0	100.9	101	96.86	97	50-125	4	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Gilbane
2730 Shadelands Drive, Suite 100
Walnut Creek, CA 94598-2540

Project: PALOS VERDE SHELF

Date Received: 05/20/14
Work Order: 14-05-1480
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-418-9	**LCS**	**Solid**	**GC/MS HHH**	**06/04/14**	**06/16/14 21:03**	**140604L30**
099-16-418-9	**LCSD**	**Solid**	**GC/MS HHH**	**06/04/14**	**06/16/14 21:32**	**140604L30**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB018	50.00	31.56	63	31.27	63	50-150	33-167	1	0-25	
PCB028	50.00	34.25	68	36.12	72	50-150	33-167	5	0-25	
PCB044	50.00	31.59	63	32.32	65	50-150	33-167	2	0-25	
PCB052	50.00	30.25	60	30.79	62	50-150	33-167	2	0-25	
PCB066	50.00	37.05	74	38.45	77	50-150	33-167	4	0-25	
PCB077	50.00	33.66	67	35.48	71	50-150	33-167	5	0-25	
PCB101	50.00	31.56	63	32.15	64	50-150	33-167	2	0-25	
PCB105	50.00	29.47	59	37.34	75	50-150	33-167	24	0-25	
PCB118	50.00	33.60	67	35.05	70	50-150	33-167	4	0-25	
PCB126	50.00	29.30	59	32.82	66	50-150	33-167	11	0-25	
PCB128	50.00	24.95	50	27.78	56	50-150	33-167	11	0-25	
PCB170	50.00	34.81	70	34.11	68	50-150	33-167	2	0-25	
PCB180	50.00	29.08	58	32.79	66	50-150	33-167	12	0-25	
PCB187	50.00	29.19	58	32.99	66	50-150	33-167	12	0-25	
PCB195	50.00	43.44	87	43.43	87	50-150	33-167	0	0-25	
PCB206	50.00	39.37	79	37.71	75	50-150	33-167	4	0-25	
PCB209	50.00	39.27	79	42.40	85	50-150	33-167	8	0-25	

Total number of LCS compounds: 17
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 Limits

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Glossary of Terms and Qualifiers

Work Order: 14-05-1480 Page 1 of 1

Qualifiers	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 suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
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.
BV	Sample received 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.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
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.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No: 12926

Order Number: SG012384

Date Shipped: 5/19/2014

AirBill No(s): 560847650191

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. C
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712
FAX: 1-702-795-8210

To: DANIELLE GONSMAN
CALSCIENCE ENVIRONMENTAL LAB
7440 LINCOLN WAY
GARDEN GROVE CA 92841
714-895-5494

14-05-1480

Sample ID	Sigma ID	Qty	Description/Remarks	→ Catalogue Number
SRS1830	SR0668	1	PESTICIDES/CBC-MARINE SEDIMENT	SR-PES

5/19/14

SUPERFUND SITE NAME: PALOS VERDE SHELF

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time 1330 5/19/14	Received by: (Signature)	Date/Time
Custody Seal(s): Present/Absent	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time 5/20/14 1030

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ORIGIN ID:LASA (702) 895-8712
AIMEE PEREZ
SHAW ENVIRONMENTAL, INC.
2700 CHANDLER AVE.
SUITE C
LAS VEGAS, NV 89120
UNITED STATES US

SHIP DATE: 19MAY14
ACTWGT: 1.0 LB MAN
CAD: 0157618/CAFE2704

BILL SENDER

TO ATTN: DANIELLE GONSMAN
CALSCIENCE ENVIRONMENTAL LAB, INC.
7440 LINCOLN WAY

GARDEN GROVE CA 92841
(714) 895-5494 X 232 REF: 03010000
DEPT: KEITH

FedEx Express

TRK# 0201 5608 4765 0191

TUE - 20 MAY 10:30A
PRIORITY OVERNIGHT

QZ APVA

92841
CA-US SNA

Part # 156148-434 NRIT 6-05

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 14-05-1 4 8 0

SAMPLE RECEIPT FORM

~~Cooler~~ BOX 1 of 1

CLIENT: QATS Lab DATE: 05/20/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 20.7 °C - 0.3 °C (CF) = 20.4 °C ☐ Blank ☐ ~~Sample~~

☑ Sample(s) outside temperature criteria (PM/APM contacted by: IS)

☐ 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 Checked by: IS

CUSTODY SEALS INTACT:

☐ Cooler ☑ BOX ☐ No (Not Intact) ☐ Not Present ☐ N/A Checked by: IS

☐ Sample ☐ _____ ☐ No (Not Intact) ☑ Not Present Checked by: SR

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	~~☑~~ 5/20/14	☑	☐
☑ 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	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
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® ☑ 2oz 5035

Aqueous: ☐VOA ☐VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister Other: ☐_____ Trip Blank Lot#:_____ Labeled/Checked by: SR

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 659

Preservative: h: HCL n: HNO_3 na_2:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered Scanned by: 659

* No Collection date per label

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